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ABSTRACT

This is one of six related reports that describe the effects of the current Title I funds allocation formula and examine several alternatives. This particular study focuses on the effectiveness of Title I in directing Federal education funds to school districts and schools serving low-income children. The Title I formula provides, in general, that each school district shall receive for each eligible child, 40 percent of the average per-student expenditure in that district's state. The actual allocation process involves three stages: the Office of Education allocates funds to counties; states, sometimes using different criteria, allocate county grants to school districts; and school districts, using their own criteria, allocate Title I resources to schools. This study examines the effectiveness of the overall formula in allocating funds to low-income counties and districts, as well as the effects of the flexibility permitted states and districts in selecting their own criterion. It also compares Title I to other Federal and State programs to examine the extent to which Title I redistributes funds to low-income areas and equalizes educational expenditures on low-income students. (Author/JG)

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Title I Funds Allocation: The Current Formula

A Report From the National Institute of Education

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The National Institute of Education
U.S. Department of Health, Education and Welfare
Washington, D.C. 20208

TITLE I FUNDS ALLOCATION: THE CURRENT FORMULA

September 30, 1977

The National Institute of Education
U.S. Department of Health, Education, and Welfare
Washington, D.C. 20208

PREFACE

The Compensatory Education Study on which this report is based was requested by Congress in the 1974 Elementary and Secondary Education Amendments. The 1974 Amendments emphasize the direct responsibility of the National Institute of Education (NIE) to the Congress. The study began in February of 1975 only after Congress had reviewed an official research plan submitted by NIE; it was funded with $15 million specially set aside from the Title I program appropriation. Results of the study will be reported directly to the President and the Congress.

This direct responsibility to Congress led NIE to ensure that the study could be planned and integrated within the Institute. A special staff was established to conduct the study, and it was placed in NIE's Educational Equity Group. That staff has planned and closely managed the research on which this report is based and the 35 research projects that make up the whole compensatory education study.

James Harvey, Charles Troob, and Alison Wolf were responsible for planning and supervising the research on which this report is based. James Harvey wrote most of the report. Paul Hill and Iris Rotberg also contributed to the design of the studies reported here. Chapters I through III are based on data prepared and analyzed by Charles Troob with the assistance of Linnea Hoffman. Chapter IV is based on data collected and analyzed by Alan Paller and Steve Smith of Applied Urbanetics, Incorporated. Chapter V was written by Margot Nyitray of NIE from data collected and analyzed by James Murray of Policy Research Corporation. Alison Wolf wrote Chapters VII and VIII, based on analyses conducted by Michael Consiglio of Applied Management Sciences and Martin Feldstein of Harvard University, respectively.

The work of several other people outside NIE is reflected in this report. In particular, Stephen Barro provided constructive comments on an early draft. Genevieve Dane and Carolyn Homer of the Office of Education, as well as Forrest Harrison of the National Center for Educational Statistics, Charlene Doyle of the

Office of the Assistant Secretary for Planning and Evaluation, and Arno Winard, of the Bureau of the Census, were generous with their time as the research progressed.

In addition, the staff of Biospherics Incorporated, including in particular, Bill Sowers, Rose Gerstner, and John Shipman, were unfailingly patient in editing and preparing this report and the others provided in this series.

Chairman Owen Peagler of the National Advisory Council on the Education of Disadvantaged Children and the members and staff were generous with their time in advising on the execution of the study, as were a great number of educational agencies and associations at the Federal, state, and local levels. The staff of the U.S. Office of Education's Division for the Education of the Disadvantaged has been consistently open and helpful throughout the study.

Members of the NIE staff too numerous to mention have offered expert advice on research and helped select contractors. In particular, Vera Brown and Michael Timpane provided useful comments on this report.

Paul Hill, Director
NIE Compensatory Education Study

Iris Rotberg, Associate Director
NIE Compensatory Education Study

SUMMARY

This is one of six reports that the National Institute of Education (NIE) is publishing in the summer and fall of 1977 in response to a mandate contained in the Elementary and Secondary Education Amendments (ESEA) of 1974. The purpose of this report is to describe the effects of the current Title I allocation formula on the distribution of funds and to examine several selected alternatives. The other reports in this series include:

- A description of the services provided with Title I funds
- An analysis of the likely consequences of using student achievement test scores to allocate funds to States and school districts
- The results of demonstration projects in 13 school districts that are using new methods, featuring student achievement data, to allocate Title I funds among schools and students
- The results of a major new study on the effectiveness of selected aspects of compensatory instructional services
- An assessment of Federal and state administration of the Title I program.

This volume focuses on the effectiveness of Title I of ESEA in meeting one of its principal purposes: directing Federal education funds to school districts and schools serving low-income children.

The formula designed to make that goal a reality provides, in general, that each school district shall receive for each child counted in the formula, 40% of the average expense of educating a child in that district's State. There are several categories of formula-eligible children; however, over 90% of them are 5- to 17-year-old children

counted in the 1970 census and determined to be from poor families according to the official Government measure of poverty, the Orshansky Index. Most of the rest of the children counted in the formula are from families receiving more than $5,040 annually under the Aid to Families with Dependent Children (AFDC) program. Because Title I is not fully funded, in 1977 districts received only 16% of the average state expenditure, rather than the 40% designated by the statute.

The actual allocation process involves three stages: (1) the Office of Education allocates funds to counties; (2) States, sometimes using different criteria, allocate county grants to school districts; (3) school districts, using their own criteria, distribute Title I resources to schools.

NIE's research examined the effectiveness of the overall formula in allocating funds to low-income counties and districts, as well as the effects of the flexibility permitted States and districts in selecting their own criterion for subcounty allocation and school eligibility determination.

Moreover, NIE has also compared Title I to other Federal and state programs to examine the extent to which Title I redistributes funds to low-income areas and equalizes educational expenditures on low-income students.

The principal findings at the county level are:

- The Title I formula clearly accomplishes the purposes intended by the framers of the statute. As the number of formula-eligible children in a county increases, the average Title I allocation to the county rises consistently.

- The largest proportion of Title I money is directed to the two kinds of places with the most formula-eligible children: large central cities and rural sections outside metropolitan areas.

- Southern States, which contain the largest proportions of children counted as eligible under the formula, receive the largest proportion

of Title I funds, followed by the Northeast, North-Central, and Western regions.

- Due to their very high concentrations of low-income children, Southern counties receive more money for each school-aged child than counties in other regions. The correlation between the Title I allocation per school-aged child and the percentage of formula-eligible children is extremely high--0.93.

- The average amount for each formula-eligible child at the county level reflects the average expenditures of the States in which the counties are located. Urban and Northeastern counties receive the most money for each formula-eligible child; rural and Southern counties, the least.

- The allocation per formula child is relatively low for counties that contain high proportions of eligible children. This is because the Southern States, which have the lowest educational expenditures, also contain most of the districts that have heavy concentrations of low-income children.

An analysis of district grants indicates that, in the aggregate, district allocations reveal patterns similar to those observed at the county level. A study of subcounty allocation examined the degree to which unusual subcounty formulas change the distribution of funds to some districts. The principal findings of the study are:

- Of the 46 States that must allocate county grants to districts, 24 attempt to replicate the statutory formula used to allocate funds to counties, 10 emphasize 1970 census data in their allocations, 5 rely solely on AFDC data, and 7 use unique formulas.

- Detailed analyses of data from 24 States indicate that States that ignore census data in subcounty allocation alter the allocation intended by the Federal formula considerably. As much as 16% of the

Title I funds in some States would shift among districts if the Federal statutory formula were substituted for current state procedures.

- Imposition of the Federal formula on the subcounty allocation process in States emphasizing AFDC for subcounty allocation would probably help districts with poverty concentrations in excess of 20%; however, it would do so at the expense of central cities and districts with high concentrations of minority students.

- Other than more frequent censuses, there is probably no source of up-to-date information that could support perfectly consistent subcounty allocation procedures.

District school selection and resource allocation procedures were examined using data obtained in the National Survey of Compensatory Education, which obtained detailed information on Title I services, students, and district allocation procedures in 100 school districts in 1975-1976. In general, the survey data indicated:

- Census, AFDC, and school lunch information is most commonly used in determining school eligibility, although 10 different sources of information were cited by the districts.

- School districts usually employ more than one source of data in determining eligibility.

- Based on data collected in the survey, NIE calculated that between 45% and 48% of the schools in the districts surveyed would be eligible if census, AFDC, or free lunch counts alone were used to determine eligibility.

- The districts, however, report that 68% of their schools are eligible.

- It appears that districts are counting a school eligible if it meets any of the criteria they use--almost 15% of the schools eligible under a criterion such as free lunch counts are deemed ineligible under other criteria such as census data.

- Targeting specific schools as a separate step appears to be practically nonexistent. Over 80% of the districts report serving all eligible schools, with the result that 94% of the eligible schools and 62% of all schools in Title I districts receive some Title I resources.

- District criteria for distributing Title I resources among target schools vary widely. The number of teachers or amount of equipment provided may be based upon the numbers of low-achieving students in the school, the numbers of low-income students in the school, or very vague estimates of where the need is greatest. The regulations governing the resource allocation process to targeted schools provide little direction for district administrators.

NIE also examined Title I to see how it compared with other Federal and state programs in terms of the degree to which it provides more money to low-income than high-income areas, equalizes funding among areas, and adds to total educational spending. In general, it appears:

- Title I has greater redistributive effects than either state aid programs on average or other Federal aid examined as a whole.

- Title I has only a limited effect on equalization, mainly because the state cost factor provisions direct funds to areas already providing large amounts of money for education.

- Approximately two-thirds of every Title I dollar is spent on additional educational programs at the local level--a figure that far exceeds other Federal as well as state programs.

THE NIE COMPENSATORY EDUCATION STUDY

REQUEST FOR THE STUDY

The Education Amendments of 1974 (Public Law 93-380), the major education legislation of the 93d Congress, extended and changed the Elementary and Secondary Education Act (ESEA) of 1965 and extended other Federal education programs, including the Education of the Handicapped Act and the Adult Education Act, as well as the impact aid, Indian education, and emergency school aid programs.

The law also directed various Federal agencies to conduct studies and surveys so Congress might have the benefit of more up-to-date and accurate information during its future consideration of legislation to assist elementary and secondary education. Among these directives is Section 821 of the Education Amendments, which instructs the National Institute of Education (NIE) to conduct a study of compensatory education, including compensatory programs financed by States and those funded under authority of ESEA Title I.

Compensatory education includes a number of Federal and state programs in addition to ESEA Title I. The relative size, scope, and long history of Title I mark it as the most important of the compensatory education programs. To ensure adequate depth and scope for the study, NIE chose to focus most of its attention on Title I. In 1977, that title, the largest Federal education effort at the elementary and secondary level, provided over $2 billion, most of which was used to improve educational programs for low-achieving students in school districts serving children from low-income families.

Specifically, Section 821 instructs the Institute to conduct a study incorporating:

- An examination of the fundamental purposes and effectiveness of compensatory education programs

- An analysis of the ways of identifying children in greatest need of compensatory education

- An exploration of alternative ways of meeting these children's needs, including the use of written educational plans

- An examination of the feasibility, cost, and consequences of alternative ways of distributing Federal compensatory education funds

- Not more than 20 experimental programs to examine the issues above

The relevant sections of the 1974 statute authorizing the study are reproduced in Appendix A.

Section 821 also directs the Presidentially appointed National Advisory Council on the Education of Disadvantaged Children to advise the Institute on the design and execution of the study.

Finally, the law, as amended by Public Law 94-482, requires NIE to submit interim reports to the President and Congress on December 31, 1976, and on September 30, 1977, and to submit a final report in September 1978.

LEGISLATIVE BACKGROUND

The breadth of the examination of compensatory education requested of NIE, ranging from the allocation of funds to specific instructional approaches, reflects a number of concerns that figured prominently during the 1974 Congressional consideration of the extension of ESEA Title I. Among the concerns at issue were:

- The effects of altering the definition of poverty used in the Title I allocation formula

- The feasibility of using measures of student achievement rather than numbers of low-income children in the formula

- The possibility of requiring individualized program plans (similar to those for each student participating in a Title I program

- The merits of requiring school districts to spend as much as 65% of their Title I grants on basic skills instruction in reading and mathematics

- The relatively narrow focus of most prior efforts to evaluate the effectiveness of Title I

RESEARCH STRATEGY

[illegible]

[illegible]

- Fund allocation
- Service delivery
- Student development
- Program administration

This study defined the first phase of these steps as the "implementation process" in Title I. The fourth was designed to determine how the administrative structure required to implement such a large education program promotes achievement of program purposes and how administration might be improved.

FUNDAMENTAL PURPOSES

To examine the fundamental purposes of compensatory education programs, the three philosophical concepts that might have motivated the program's originators must be distinguished from the more concrete operational purposes that are built into the program.

The originators of compensatory education efforts, such as Title I, may have had in mind some very general objectives, including helping to eliminate poverty, contributing to the redistribution of wealth and opportunity, reforming education, and symbolizing society's commitment to helping the disadvantaged. Although it is possible to speculate about what their motivations might have been, the relative [illegible] importance of the established the program remain a matter for [illegible]. Some of the purposes which were included in both Title I and the [illegible] have been the following [illegible]:

1) [illegible]

2) [illegible]

3) To contribute to the cognitive, emotional, social or physical development of participating students

These goals of Title I are consistent with one another, but each is not equally important to all Members of Congress. Congressional debates and even the language of different parts of committee and conference reports suggest that Members of Congress differ about the relative importance of competing purposes. Some Congressional statements imply that the greatest harm is inherently in areas where Title I services are provided services only to increase children's academic achievement (making the third the most important). Other statements, however, make it clear that allocation of funds and delivery of services are important ends in themselves and might, in fact, define the practical limits of Federal action to promote the development of children.

STRATEGY FOR ASSESSING COMPENSATORY EDUCATION

Evaluation of Title I must start from the recognition that the program has several goals, and to focus exclusively on one inappropriately ignores the others. Evaluation must also acknowledge that Title I operates through the Federal system and that state and local governments determine what it will be in practice. Although there is only one Federal Title I program, with one basic framework of laws and policies, it operates differently in every State, in 14,000 school districts, and in countless classrooms. Thus to understand and evaluate Title I it is necessary to examine the ways in which Federal policy interacts with the actions of State and local educational agencies and with the characteristics of the programs.

Early national evaluations of Title I concentrated only [illegible] to [illegible] accounting for the [illegible] to which [illegible] Those evaluations [illegible] Title I. It was assumed that [illegible] objectives and that [illegible] of the [illegible] to [illegible] the [illegible] to [illegible] Title I from other [illegible] to design [illegible] Title I [illegible] to accomplishing [illegible] achievement of each fundamental purpose and (2) examine the implications of alternative ways of organizing the efforts of the Federal, State, and local governments to achieve these purposes.

of several intended to comply with the statutory requirement eport be completed not later than September 30, 1977. It n the extent to which compensatory education is fulfilling its ion of financial assistance to school districts and to schools in on of low-income children.

s are being published this summer and fall on the following

- rovided with Title I funds
- y, costs, and consequences of using counts of low-dren in allocating Title I funds to school districts
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- n of compensatory education

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CHAPTER I. THE FUNDS ALLOCATION PROCESS

Title I of the Elementary and Secondary Education Act (ESEA) of 1965, as amended, is the largest Federal program providing assistance to elementary and secondary education. The formula by which Title I allocates funds to States and school districts was designed to accomplish a specific purpose: to provide additional funds for districts and schools serving low-income children.

A formula grant program such as Title I involves a number of Congressional decisions on how funds should be disbursed. Factors in these decisions include: the appropriate population counted in the grant formula; the amount to be allocated per eligible; the structure of the grant, including, for example, whether it should be a block or matching grant; and whether limitations should be placed on the use of grant money.

In establishing Title I, Congress decided that low-income children were the appropriate population for inclusion; that allocations in the form of a block grant should be related to state costs of education; and that the funds should be used for special services for educationally disadvantaged children.

This report examines the effectiveness of the Title I formula in allocating funds to areas with low-income children, and the contributions of each of the major formula elements to the patterns of distribution. It discusses the allocation of funds to counties, within counties to local educational agencies (LEAs), and within school districts to eligible schools. In addition, the report examines the effectiveness of Title I in increasing spending on education at the local level, and several alternatives that have been proposed for allocating Federal funds to areas with low-income

children. Finally, the report compares the distributional effects of Title I with those of other Federal programs and state aid for elementary and secondary education.

As background for the report, the remainder of this chapter provides a general overview of the current Title I funds allocation process. This process is discussed in greater detail in Appendix B.

ALLOCATIONS TO STATES AND SCHOOL DISTRICTS

Title I currently provides over $2 billion for elementary and secondary education in the form of grants to LEAs and to state education agencies (SEAs). The title has two sections: Part A, funded at $2.25 billion in fiscal year 1978, provides grants to LEAs, SEAs, and to the Bureau of Indian Affairs (BIA); and Part B, funded at $24.8 million, provides grants to States with "high effort" and money with which States select and support special projects run by LEAs. (High-effort States are those in which the ratio of non-Federal expenditures on education to personal income is high.) Table I shows how funds under both Parts A and B are distributed among various programs; Appendix C lists Title I allocations by State. NIE's research focuses on the allocation of Part A grants to LEAs. These grants account for 81% of total Title I expenditures. Most of the remainder is used for programs operated by state agencies serving such special populations as handicapped or migrant children.

An LEA's allocation under Part A is determined by a formula. For each school-aged child from a low-income family, the LEA is entitled to a Federal grant worth 40% of the average per-pupil expenditure (APPE) in that State. An LEA's entitlement, therefore, is computed by multiplying the number of formula-eligible children by the cost factor of 40% of the State's APPE. However, no State's cost factor is permitted to exceed 120% of the national APPE; nor can any State's cost factor fall below 80% of the national average. Because the appropriations for Title I fall short of the level of authorization, LEAs do not receive full entitlements of 40%; they received only about 16% of the state expenditure for each eligible child in 1977.

TABLE 1

TITLE I ALLOCATIONS FOR FISCAL YEARS 1977 AND 1978*
($ in millions)

Title I--Part A	1977	1978
LEA grants, 50 States and District of Columbia	1,653.5	1,851.5
LEA grants, Puerto Rico	46.8	53.0
LEA grants, outlying areas	3.2	**
Grants to state agency education programs:		
For handicapped children	111.4	121.6
For migrant children	130.9	145.8
For children in institutions for the delinquent	19.0	19.5
For children in adult correctional institutions	7.8	8.3
For children in institutions for the neglected	2.0	2.0
Grants to the Bureau of Indian Affairs	17.6	**
Grants to SEAs for administration of Title I	21.2	23.4
Subtotal, Part A***	2,013.5	2,247.3
Title I--Part B		
Special incentive grants to LEAs	24.5	24.5
Special grants to SEAs for administration of Part B	0.2	0.2
Subtotal, Part B***	24.8	24.8
Other		
Evaluation and studies	11.5	12.3
Adjustments and undistributed funds	0.2	0.7
Subtotal, Other	11.7	13.0
TOTAL***	2,050.0	2,285.0

*The funds allocated in Title I are appropriated in the budget for the prior fiscal year.

**An allocation of $22.3 million will be shared by BIA and outlying LEAs when the appropriate division has been determined.

***Figures do not balance because of rounding.

There are several categories of eligible children. For the sake of clarity, they were referred to earlier as school-aged children from low-income families. To be more precise, those eligible for counting in determining LEA grants include:

- Children aged 5 to 17, inclusive, from families below the Orshansky poverty level as counted in the census[1]

- Two-thirds of the children aged 5 to 17 from families receiving payments, under Aid to Families with Dependent Children (AFDC), which total more than the current poverty level for a nonfarm family of four

- Children aged 5 to 17--being supported with public funds--who live in foster homes or in institutions for neglected or delinquent children and depend on LEAs for educational services

The data required for the formula are readily available for the entire Nation only to the county level. As a result, the U.S. Office of Education (OE) applies the mandated formula only to this level, and it delegates to the States the responsibility for allocating county grants to LEAs, in cases where LEAs are not coterminous with counties. These subcounty allocations, which affect most LEAs, must be based on counts of low-income children, and States are required to use procedures and data approved by the Commissioner of Education.

Procedures for Allocating Funds Within School Districts

LEAs have considerable control over the Title I funds allotted to them. Although their use of money is governed by a number of Federal and state regulations and guidelines, the LEAs decide which schools and pupils to select for Title I programs and how to distribute the federally funded resources among these schools and pupils.

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[1] The Federal poverty definition, named for its developer Mollie Orshansky, sets poverty-level incomes by estimating the costs of adequate diets for different sizes and types of families and the typical costs of other goods and services relative to food expenditures. It includes 124 different poverty lines and was incorporated into the Title I formula in 1974.

The regulations have two major objectives: (1) to ensure that Title I services go to schools in the poorest areas and serve the lowest achieving students in them; and (2) to ensure that services paid for with Title I funds are additional to those that districts routinely provide to their students.

In selecting the recipients of Title I services, LEAs are expected to:

- Identify eligible schools in the district by using a poverty criterion
- Select target schools (that is, decide which of the eligible schools will, in fact, receive Title I services)
- Distribute services among targeted schools
- Identify the categories of children to be served in target schools
- Select from those eligible the students who will, in fact, be served

The students selected for participation in Title I programs at the school level are not necessarily those counted in the formula used to allocate funds at the county level. Moreover, a definition of poverty other than that used to allocate funds to counties is permissible both in the subcounty allocation process and in the procedures by which districts identify and target eligible schools. The total funds allocation process involves at least four steps:

- A Federal formula based largely on income allocates funds to the counties.
- Within counties, a state formula, frequently using different definitions of poverty, allocates funds to districts.
- Within districts, a third definition of poverty identifies and targets eligible schools.
- Students are selected for services, irrespective of their income, on the basis of their need for educational assistance.

CHAPTER II. DISTRIBUTIONAL EFFECTS OF THE CURRENT FORMULA

This chapter describes the distributional effects of the current Title I formula. The data analyzed are for fiscal year 1977, when Title I allocations to school districts in the United States under Part A amounted to $1.653 billion. Any school district with 10 or more children eligible for counting in the formula was entitled to receive funds under Part A.

Except for the first year of the program, the monies appropriated for Title I have not been sufficient to fund district entitlements fully. Because counts of eligible children are readily available only at the county and the school district levels, OE calculates county (or counties, where the state is allocating these funds among the school districts rather than districts within the county).

The following analyses examine the distributional consequences of the Title I formula at the county level and then compare them to the distributional pattern at the district level.

COUNTY ALLOCATIONS AND NUMBERS OF ELIGIBLES

Title I was designed to direct funds to areas in relation to the number of low-income children residing in them, as defined by Congress for the purposes of the program. At the county level, it clearly succeeds in this most basic objective. Table 2 demonstrates that Title I county allocations rise consistently in relation to the number of formula-eligible children residing in the county (see Appendix D).

TABLE 6

RELATIONSHIP BETWEEN NUMBERS OF FORMULA-ELIGIBLE CHILDREN AND COUNTY ALLOCATIONS

Formula-Eligible Children in County	Average Title I Allocation
0 to 100	$ 10,044
101 to 250	33,184
251 to 500	66,383
501 to 1,000	133,462
1,001 to 2,500	289,021
2,501 to 5,000	620,361
5,001 to 10,000	1,314,372
Over 10,000	5,341,166

The relationship between the number of formula-eligible children in a county and the size of the allocation is explained because the Title I formula takes other factors into account. Nevertheless, this relationship is strong.

DEMOGRAPHIC CHARACTERISTICS OF RECIPIENT AREAS

A more complete description of the distributional effects of the Title I formula can be obtained by examining various demographic characteristics of areas receiving funds. The following section describes how the allocation formula benefits counties classified by:

- Place types--i.e., counties classified as central city, suburban, and nonmetropolitan
- Concentrations of poor population
- Concentrations of minority population[1]

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[1] In addition, Appendix E examines the allocation of funds among counties and school districts classified by a number of other variables such as median family income and equalized property value per pupil. The relationship of Title I allocations to expenditures per pupil is discussed in Chapter VIII.

Each classification is discussed, first, in national terms, and then in terms of any significant regional or intraregional differences. The analyses focus on the amount of money different types of counties, in different regions, receive for each child counted in the formula (formula child). These amounts can be compared with a distribution based solely on the 8,568 million children counted in the formula, under which each county would have received $193 per formula child residing within its boundaries.

The yardstick of $193 is useful only as a rough approximation because the amount a county receives for each eligible child is weighted by the cost factor of the State in which the county is located. Nevertheless, in considering the distributional effects of the Title I allocation formula, it is apparent that jurisdictions receiving more than $193 per formula child are receiving more assistance per child than the national unweighted average. Similarly, jurisdictions receiving less than $193 per formula child are helped less than the national average.

Quite clearly, in writing the Title I formula, Congress intended that some areas would receive more money for each eligible child than others: the principal purpose of the APPE provisions was to provide a level of Federal funds that was reasonably related to the cost of education for each eligible child. The APPE provisions, therefore, provide a crude measure of state education costs, which is applied to all districts within each State.

The differences in dollar allocations per formula child, therefore, should not be regarded as unusual. Given the way the formula was written, the lack of such differences would indicate a serious problem with implementation of the formula.

It might be desirable to distinguish, within individual States, expenditure differences between central city, suburban, and rural areas to address the question of whether the purchasing power of Title I is equal in different areas. However, a practical method of implementing such an index has never been developed, much less seriously discussed in Congress.

Allocations by Place Type

Nationally, as Table 3 demonstrates, Title I provides large amounts of money to central cities and nonmetropolitan areas; over two-thirds of Title I funding goes to these areas, leaving slightly over one-quarter of the total allocation for suburban jurisdictions. In fact, over half of the total allocation goes to the largest central cities and rural sections of nonmetropolitan areas.[2]

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[2]The Office of Management and Budget (OMB) designates three kinds of geographic units by economic and demographic characteristics: (1) central cities; (2) standard metropolitan statistical areas (SMSA), which include as many as three central cities; and (3) nonmetropolitan areas. In this report, the definitions of central cities and nonmetropolitan areas correspond to OMB definitions, and "suburban" refers to places within SMSAs and outside the central cities.

"Large central cities" refers in this report to the 56 cities that reported populations of 250,000 or more in 1970. "Other central cities" include all other officially designated central cities as of 1970, and range in size from about 15,000 to 250,000 people.

"Suburban, urban" includes any other jurisdiction with a population over 2,500 in an SMSA. In major metropolitan areas, such jurisdictions can be very large. "Suburban, rural" includes rural areas of counties located within SMSAs. In addition, all areas added to existing SMSAs between 1970 and 1975 and all new SMSAs created during this period are classified as suburban.

Nonmetropolitan areas include all areas outside SMSAs as of 1975. Such areas are classified as "nonmetropolitan, urban" if they contain populations exceeding 2,500 but less than 50,000, and "nonmetropolitan, rural" if the population is less than 2,500.

NIE census tabulations were constructed from individual census records, which identify whether each household is in a central city, suburban, or nonmetropolitan area. The resulting tabulations indicate the number of children and poor children in each county living in each kind of place. Each county's allocation was divided among the place types in proportion to their share of the formula children.

TABLE 3

ALLOCATIONS BY PLACE TYPE

	Allocation ($ in millions)	Percent of Total Allocation	Per Formula Child
Central city	$633.3	36.3	$204
Large	460.6	27.9	210
Other	172.7	10.4	188
Suburban	461.8	27.9	198
Urban	308.7	18.7	203
Rural	153.1	9.2	189
Nonmetropolitan	558.4	33.8	178
Urban	161.3	9.8	179
Rural	397.1	24.0	177

However, this picture changes considerably when the average dollars allocated per formula child are considered. Under this standard, suburban areas receive over 11% more, and central cities 15% more, than do nonmetropolitan areas. The differences are slightly more pronounced if large central cities are compared with rural nonmetropolitan areas: large central cities receive 18% more per formula-eligible child than do rural nonmetropolitan areas. Compared with the national average of $193 per formula-eligible child, large central cities receive 109% of the average; and rural nonmetropolitan areas, 92%.

The difference in average dollars per eligible among cities, suburbs, and nonmetropolitan counties can readily be explained by the cost factor, which weights allocations by the average expenditures in the State where a county is located. Per-pupil expenditures are higher in the predominantly urban (and suburban) States than in the predominantly rural ones. For example, States such as South Carolina and Georgia, which have low average per-pupil expenditures, received $163 in 1977 for each eligible child. By contrast, New York received $244 per eligible child, and Pennsylvania, $228. (For details see Appendix F.)

Although cities and suburbs benefit at the expense of nonmetropolitan areas under the dollars per formula-eligible standard, suburban areas fall behind the other two in total allocations. The location of the children counted in the formula accounts for this. As is apparent from Table 4, central cities and nonmetropolitan areas account for almost three-quarters of the total children eligible for counting in the formula. It is, therefore, hardly surprising that they would receive most of the Title I allocation.

TABLE 4

DISTRIBUTION OF FORMULA ELIGIBLES BY PLACE TYPE

	Number of Eligibles (in millions)
Central city	3.11
Large	2.19
Other	0.92
Suburban	2.33
Urban	1.52
Rural	0.81
Nonmetropolitan	3.14
Urban	0.90
Rural	2.24

Regional Differences.--Because conclusions based on data at the national level might conceal important regional differences, the data presenting allocations by location were reproduced for the four census regions and nine census divisions of the Nation. The regional data demonstrate the origins of the allocation patterns described above.

As Table 5 demonstrates, the South, with 45% of the eligibles, receives almost 40% of the total allocation. Each of the other regions fares slightly better in terms of

the percentage of the total allocation it receives, given its percentage of the total eligibles. Each does so because the average expenditures of its States, in general, are relatively high.

TABLE 5

REGIONAL DISTRIBUTION OF FORMULA ELIGIBLES AND TITLE I FUNDS

	Eligibles (millions)	Percent	Funds (millions)	Percent
Northeast	1.62	18.8	$378.9	22.9
North-Central	1.80	21.0	$367.4	22.2
South	3.90	45.5	$660.5	39.9
West	1.26	14.7	$246.7	14.9

The regional data also reflect the national patterns observed in the examination of dollars per eligible child. The heavily urbanized Northeast receives the most dollars per eligible, whereas the rural South receives significantly less.

The largest beneficiaries in terms of allocations per formula-eligible child are large central cities and suburbs in the Northeast (see Table 6 and Appendix G). The advantage enjoyed by northeastern cities is evident, and even smaller northeastern cities receive more than cities in other regions. Northeastern suburban and nonmetropolitan counties also receive significantly more dollars per formula-eligible child than do comparable counties in any other region. The central cities and suburbs in the north-central region are reasonably close to the northeastern cities and suburbs. Even these places, however, receive only 87% and 89%, respectively, of the dollars per eligible received by their northeastern counterparts.

TABLE 6

REGIONAL ALLOCATIONS PER FORMULA-ELIGIBLE CHILD BY PLACE TYPE

	Average	Central City	Suburban	Non-metropolitan
Northeast	$234.29	$237.76	$233.67	$220.57
South	169.25	173.91	172.01	165.55
North-Central	203.80	207.99	208.29	195.96
West	196.05	196.78	198.30	191.62

The differences apparent in data on regional allocations per formula-eligible child also reflect the effects of the cost factor. Regions encompassing States with high cost factors receive higher allocations for each formula child than do regions encompassing States with lower expenditures. Almost all Northeastern States receive over $200 per eligible due to their high cost factor, a level matched by very few States in other regions. By contrast, over half the States in the South receive the minimum of $163 per eligible due to their low level of current expenditure per pupil.

Concentrations of Formula-Eligible Children

Title I's distributional effects reflect what might be anticipated, given the provisions of the allocation formula designed for the program. Average size of grants to jurisdictions increases as the number of formula eligibles increases. The largest proportion of the money is directed to jurisdictions wtih the most formula-eligible children. The average amount received by various jurisdictions for each formula-eligible child changes in relation to the expenditures of the State in which the jurisdictions are located.

However, an unanticipated effect of the formula is apparent if the Title I grant per formula child is examined in relation to jurisdictions with different concentrations of those children. As Table 7 demonstrates, the county allocation per formula child decreases as the proportion of such children increases.

TABLE 7

ALLOCATIONS TO COUNTIES BY RATE* OF TITLE I ELIGIBILITY

Percent Eligible	Title I per Eligible	Number of Counties	Total Title I Allocations ($ in millions)	Percent of Total Allocations
Under 7.50	$215	188	$ 83.8	5.1
7.5 to 12.49	208	624	330.6	20.0
12.5 to 19.99	197	875	514.2	31.1
20.0 to 29.99	183	619	322.4	19.5
30.0 to 39.99	192	425	237.8	14.4
40.0 to 49.99	165	251	86.6	5.2
Over 50.00	164	159	78.1	4.7

*U .S. eligibility rate for Title I = 16.5%.

Because Title I was enacted, in part, as a result of the recognition of the "impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs," it is surprising to find a pattern in which the greater the percentage of formula-eligible children in a county, the less aid is provided per formula-eligible child.

The location of counties with high proportions of formula children explains the pattern. As Table 8 indicates, almost all counties with eligibility rates of 30% or higher are located in the South. As a consequence of the low cost factor applied in most Southern States, the average allocation per eligible is reduced in counties with high concentrations of eligible children. Over 2.2 million eligible children, almost a quarter of the total, live in counties with eligibility rates of 30% or higher.

TABLE 8

NUMBER OF COUNTIES BY RATE OF TITLE I ELIGIBILITY, BY REGION

Eligibility Rate	Northeast	North Central	South	West
Under 7.50	22	103	20	43
7.5 to 12.49	108	338	55	123
12.5 to 19.99	73	387	244	171
20.0 to 29.99	11	152	394	62
30.0 to 39.99	3	53	347	22
40.0 to 49.99	0	16	221	14
Over 50.00	0	7	142	10
Total	217	1,056	1,423	445

SCHOOL-AGED POPULATION AND ALLOCATIONS

Due to their large numbers of formula-eligible children, central cities and nonmetropolitan areas receive large amounts of Title I funds. However, due to their relatively low expenditures on education, nonmetropolitan and southern areas receive less for each formula child than central city or suburban jurisdictions. If allocations are related to total school-aged population, the patterns observed under the per-formula analyses are changed quite dramatically. As Table 9 demonstrates, under the school-aged population standard, nonmetropolitan areas almost match central cities in per-child funding, and both receive twice as much as suburban areas.

TABLE 9

ALLOCATIONS BY PLACE TYPE

	$ Per School-Aged Child
Central city	$42.75
Suburban	19.92
Nonmetropolitan	40.21

In the same way, the regional tabulations presented in Table 10 show that the South is the major beneficiary of the allocation formula if dollars per school-aged child are used as the standard. Southern counties in every category except central cities (in which the Northeast receives more than the South) benefit more than any other area in relation to their school-aged population. Because the average level of spending in the South is low, Title I funds also generally have their greatest impact on total expenditures in Southern counties.

TABLE 10

DOLLARS PER SCHOOL-AGED CHILD BY REGION AND PLACE TYPE

	Northeast	North Central	South	West
Average	$31.81	$24.74	$40.68	$27.80
Central city	58.24	38.02	40.81	31.58
Suburban	17.77	14.22	26.42	22.80
Nonmetropolitan	29.18	27.46	54.14	34.53

This pattern is a direct result of the proportion of formula-eligible children in the various place types. In general, areas with high percentages of formula-eligible children will receive higher allocations per school-aged child than will those with lower proportions of formula eligibles. In fact, the correlation between the Title I allocation per child and the percentage of formula-eligible children is very high--0.93.

The South has the highest eligibility rate of any of the regions, and this fact explains why it fares so much better under the per school-aged child standard than under the per formula-child analysis.

COUNTY AND DISTRICT COMPARISONS

If the comparisons among various kinds of counties under the dollars per formula-child standard could be replicated at the district level, comparisons of the county and

district results would provide reliable estimates of the degree to which the distributional patterns described above continued at the district level. Unfortunately, accurate counts of all five categories of formula children--census poor, AFDC, neglected, delinquent, and foster children--are not available at the district level, so direct comparisons of county and district allocations per formula child are not possible.

However, county and district comparisons are possible on the basis of dollar allocations per child considered poor under the Orshansky definition, as counted by the Bureau of the Census. These children now account for 90% of all the children counted in the formula. Counts of such children are available at the county level, as well as for over 12,000 school districts with enrollments greater than 300. Those districts account for all but $28 million of the Title I funds spent by LEAs in fiscal year 1976.

An analysis of district allocations per census child indicates that:

- Allocations per child rise steadily with the poverty rate.
- Allocations per census child are greatest in places with the lowest poverty rates.
- Over half the money goes to areas with poverty rates under 20%.

These findings parallel analyses conducted at the county level. The similarity of the results is striking, considering that 3,241 counties are being compared to 12,000 districts. Although districts are the unit of most interest, county analyses closely parallel results at the district level.

However, several differences in these data should be pointed out. Title I appears to be slightly more effective at channeling money to high-poverty areas by district (see Table 11). While 36.6% of the funds goes to counties with poverty rates under 12.5%, only 25.0% goes to districts with rates that low. In effect, much of the money given counties with poverty rates below 12.5% gets allocated to districts in which the poverty rates are higher.

TABLE 11

COMPARISON OF ALLOCATIONS TO DISTRICTS (1976)* AND COUNTIES (1977)** ACCORDING TO POVERTY RATE

Poverty Rates	Districts 1976			Counties 1977		
	Percent of Total	$ Per School-Aged Child	$ Per Poor Child	Percent of Total	$ Per School-Aged Child	$ Per Poor Child
Under 7.50	11.2	$11	$238	10.5	$15	$272
7.5 to 12.49	13.8	23	233	26.1	25	243
12.5 to 19.99	30.1	35	216	23.3	33	216
20.0 to 29.99	25.6	52	220	22.2	51	210
30.0 to 39.99	9.0	56	167	8.0	57	168
40.0 to 49.99	5.3	72	161	5.1	75	167
Over 50.00	5.0	92	156	4.7	94	165

*Total funds = $1.54 billion.
**Total funds = $1.65 billion.

County Comparisons of Formula and Census Children

It is reassuring that allocation patterns are similar at the county and district levels when calculated on the basis of dollars per child counted as poor in the census. Nevertheless, these children are not the only group counted in the Title I formula. To determine if an analysis using allocations per census child reflects the pattern of actual allocations with reasonable accuracy, NIE compared county allocations on both the per-census child and per-formula child basis.

If fiscal year 1977 funds had been distributed solely on the basis of the 7 million census children, each county would have received $215 per census child within its boundaries. That figure is larger than the $193 calculated for all formula children, because there are fewer census children than formula children to be divided into the same Title I appropriation.

Tables 12 and 13 indicate that the overall distributional patterns under both standards are similar. Suburban areas receive more per child than rural areas under both standards, and central cities receive the most.

TABLE 12

ALLOCATIONS BY PLACE TYPE

	Per Formula Child	Per Census Child
Central city	$ 204	$ 240
Large	210	255
Other	188	208
Suburban	198	224
Urban	203	235
Rural	189	205
Nonmetropolitan	178	185
Urban	179	187
Rural	177	184

TABLE 13

ALLOCATIONS TO BENEFICIARIES ACCORDING TO REGION

	Per Formula Child	Per Census Child
Northeast		
Average	$234.29	$302.97
Central city	237.76	321.23
Suburban	233.67	294.57
Nonmetropolitan	220.57	253.41
North-Central		
Average	203.80	238.06
Central city	207.99	257.07
Suburban	208.29	250.85
Nonmetropolitan	195.96	210.53
South		
Average	169.25	172.67
Central city	173.91	179.01
Suburban	172.01	176.25
Nonmetropolitan	165.55	167.84
West		
Average	196.05	224.11
Central city	196.78	229.77
Suburban	198.30	231.92
Nonmetropolitan	191.62	206.32

In fact, while large central cities received 109% of the yardstick figure under the per formula-child measure, they receive 118% of the yardstick under the per census-child figure. Conversely, rural nonmetropolitan areas receive 92% of the yardstick number under the per formula-child standard but only 85% under the per census-child analysis.

The national differences are even more marked at the regional level. The north-central and western regions fare slightly better than the national average. The South, however, is considerably below the national average. Indeed, the average allocation per census child in the South is only 56% of the average in the Northeast.

The census standard makes the per child-allocation disparity appear more extreme due to the exclusion of the noncensus formula-eligible children, particularly those children counted under the AFDC provisions. The AFDC children account for 7% of those counted in the formula, and they are concentrated in a few urban States with relatively high AFDC benefits and high cost factors. Hence, counties in those States receive more money for their noncensus eligibles, making their per-child allocations appear larger when only census children are used as the standard.

States or counties with few AFDC-eligible children receive what they are entitled to largely on the basis of numbers of poor children alone. Such States also frequently have low cost factors. Because the number of census poor and the number of formula eligibles tend to be much closer, the dollars received per formula child and per census child are much closer.

At the county level, the actual allocations per census child, therefore, can be explained fully by the provisions of the Title I formula. The fact that the pattern of district allocations under the per census child standard closely resembles the pattern at the county level implies that district allocations, in general, also reflect the Title I formula provisions.

ALLOCATIONS RELATED TO CONCENTRATIONS OF MINORITIES

Census data were also used to examine the relationship between minority populations and Title I allocations.

The Title I allocation formula was designed to benefit minority communities only insofar as poverty is reflected in those communities. However, because the minority population is not evenly distributed among regions or counties, it is possible that areas with large percentages of minority children receive Title I assistance at a level above or below average.

One-fifth of the children 5 to 17 years old in 1970 were classified as black or Spanish-surnamed by the census. Census tabulations indicate that 42% of the black children and 28% of the Spanish-surnamed children were poor. By contrast, only 14.8% of the entire school-aged population was classified as poor.

In 1970, over one-quarter of all counties in the United States had black and/or Spanish-surnamed school-aged populations in excess of 20%. These counties had 40.6% of all children aged 5 to 17 and 56.6% of the eligibles. They received 55.5% of the Title I allocation. Thus, most counties with above average proportions of minority children were being aided almost exactly in proportion to their share of the school-aged population.

Table 14 provides a detailed breakdown of funding levels for counties with differing proportions of minority children. It confirms that counties with high percentages of black or Spanish-surnamed children receive larger allocations on the basis of dollars per school-aged child and shows that dollars per child tend to increase steadily with increases in the relative size of the minority population. When the yardsticks of dollars per poor child or per eligible are used, counties with very high proportions (60% and over) do worse than those whose minority populations numbered less than 20%, i.e., below the national average.

TABLE 14

ALLOCATIONS TO COUNTIES ACCORDING TO THEIR MINORITY CONCENTRATION

Percent Black or Spanish-Surnamed	Number of Counties	Allocations ($ in millions)	Dollars per School-Aged Child	Dollars per Census Child	Dollars per Formula Child
Under 10.0	1,951	$508.84	$23.44	$221.18	$198.62
10 to 19.9	294	227.42	24.95	222.36	196.25
20 to 29.9	229	209.05	30.64	199.81	184.82
30 to 39.9	197	276.97	37.59	220.63	192.65
40 to 49.9	170	148.76	50.33	193.09	180.93
50 to 59.9	139	109.19	68.78	217.18	193.30
60 plus	161	173.25	74.98	210.82	191.62

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CHAPTER III. ELEMENTS OF THE TITLE I ALLOCATION FORMULA

Several elements in the Title I allocation formula significantly affect the distribution of Title I funds among various kinds of school districts. The most significant element, clearly, is the count of formula-eligible children, followed in importance by the cost factor (the provisions relating to state APPE).[1]

This chapter analyzes the relative contribution to the distribution of Title I funds of the several populations counted in the Title I formula (census children; AFDC children; and foster, neglected, and delinquent children) and the state APPE requirements. Because Congressional committees examined many possible variations in the formula in 1974 before amending the Statute to include the provisions analyzed in this report, it is likely that the distributional effects of the formula were anticipated.

CHILDREN COUNTED IN POVERTY

The children counted in poverty form the basic element of the Title I program, distinguishing it as a program aimed at districts and children with special needs as opposed to a program designed to help all school districts in relation to their general school-aged population.

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[1] The formula provisions governing allocations for state agency programs do not affect the relative size of the LEA allocation to different types of district, but rather the total amount of money available for LEA grants. States vary dramatically in the amount of funding they receive for these programs, and in the difference these funds make to the size of their total Title I allocation. Funds for state agency programs range from 65.8% to 3.5% of total LEA grants. Appendix H provides figures by State.

Of the children counted in the Title I formula, 90% were 5 to 17 years old in 1970 and belonged to families below the official poverty standard in 1969. The official poverty standard is actually a set of 124 different income levels, distinguishing families according to number of family members; age and sex of head of family; number of children; and farm/nonfarm residence. The various income levels defining poverty are updated annually using the Consumer Price Index. However, because the formula as currently written requires counting all poor children in every county, census income data provide the only available figures. These data were last collected in 1969, and, moreover, are based only on a 20% sample of the population.

The Poverty Measure

The official poverty measure was developed by Mollie Orshansky, an economist from the Social Security Administration, from three basic factors:

(1) The estimated cost of a minimally adequate diet for individuals, male and female, of different ages

(2) The typical ratio of total family expenditures to food expenditures

(3) Certain modifications of (2) for small and large families

When Orshansky developed the original cutoffs, she converted food costs to total budgets by using data taken from a 1955 Consumer Expenditure Survey. This survey indicated that families typically spend about a third of their incomes on food. Orshansky accordingly reasoned that for the purpose of enumerating the poor, it was appropriate to determine the minimum amount needed to satisfy the food requirements for families of different sizes and characteristics and to multiply the results by three. Families whose cash income was at least three times the cost of the appropriate version of the Economy Plan were considered to have income adequate for basic needs and were counted as nonpoor. Families whose income fell short of three times the estimated food costs for their type were considered to be poor. The result of this process was an index of 124 poverty lines, each appropriate for a different kind of family depending on its size, urban or rural location, and other characteristics.

The Orshansky poverty lines are uniform nationally; no adjustment is made for difference in the cost of living in different areas. Farm families are assumed to consume food grown on the farm and, are therefore, assumed to need only 85% of the cash income of nonfarm families. There seems to be little dispute that wide variations exist in the cost of living from place to place, though it is often argued that the effects of different living costs are not as great at a poverty level of income as at higher levels. However, most analysts argue that the data to make scientifically defensible adjustments for living costs in the poverty standard are not available.

If substantial differences exist between living costs in different areas, it is conceivable that the poverty index undercounts the low-income population in high-cost areas and, perhaps, overcounts the population in low-income areas. Unfortunately, there is no generally acceptable way of determining the extent of this problem.

In 1969, the poverty standards developed by Orshansky were adopted by the Office of Management and Budget as the official measure to determine which individuals qualified for services under several Federal programs, including manpower training designed to assist people in poverty. Congress, in 1974, decided that the standards were also appropriate for counting students for the purpose of allocating Title I funds to school districts. Note, however, that the selection of students for Title I-funded services is a function of their educational and not their economic status.

Table 15 demonstrates the allocation effects of basing Title I funds distribution upon counts of low-income children. The left side of the table indicates, by place type, how Title I funds would be allocated if they were distributed solely, as might be the case in a general aid program, on the basis of the school-aged population. The right side indicates how the funds would be distributed solely on counts of low-income children.

The effects of allocating Title I funds on the basis of the low-income, school-aged population rather than the general school-aged population are clear. Almost half of the funds that would, hypothetically, have gone to suburban areas based on their school-aged population are distributed to central cities and nonmetropolitan areas under a poverty formula. In fact, the actual allocations do reduce the suburban share of the Title I appropriation, as Table 16 shows, although not as drastically.

TABLE 15

COMPARISON OF ALLOCATIONS BASED ON SCHOOL-AGED POPULATION AND ON LOW-INCOME COUNTS, BY PLACE TYPE

	School-Aged Population			Low-Income Counts		
	Population (millions)	Allocation ($ in millions)	Proportion of Total Allocations	Population (millions)	Allocation ($ in millions)	Proportion of Total Allocations
Central city	14.77	$ 471	28.5	2.63	$ 563	34.0
Large	9.62	307	18.6	1.81	387	23.4
Other	5.15	164	9.9	0.82	176	10.6
Suburban	23.17	738	44.6	2.06	441	26.7
Urban	17.11	545	32.9	1.31	280	17.0
Rural	6.06	193	11.7	0.75	161	9.7
Nonmetropolitan	13.93	444	26.9	3.03	649	39.3
Urban	5.03	160	9.7	0.88	188	11.4
Rural	8.90	284	17.2	2.15	461	27.9
Total		$1,653			$1,653	

TABLE 16

PROPORTIONAL COMPARISON OF ACTUAL ALLOCATIONS WITH ALLOCATIONS BASED ON LOW-INCOME COUNTS AND ON SCHOOL-AGED POPULATION BY PLACE TYPE

	Percent Allocations from School-Aged Population	Percent Allocations from Low-Income Counts	Percent Actual Allocations
Central city	28.5	34.0	38.3
Large	18.6	23.4	27.9
Other	9.9	10.6	10.4
Suburban	44.6	26.7	27.9
Urban	32.9	17.0	18.7
Rural	11.7	9.7	9.2
Nonmetropolitan	26.9	39.3	33.8
Urban	9.7	11.4	9.8
Rural	17.2	27.9	24.0

However, more funds under the actual allocation formula go to central cities, and less to nonmetropolitan areas, than would be the case if the funds were distributed solely on the basis of counts of low-income children. The differences between the actual allocation pattern and the pattern based solely on counts of low-income children are due to the inclusion of other children in the formula and the existence of the cost factor.

Table 17 compares current allocations by the nine census geographic divisions with hypothetical allocations based on school-aged population and low-income population. Clearly, New England receives more under the current system than it would under the low-income allocation system alone. The Middle Atlantic States fare better under the current formula than they would under either the low-income or population alternatives. The South does not get as much under the actual allocation formula as it would if funds were allocated solely on the basis of low-income children, but it receives substantially more than its school-aged population alone would warrant. The

West North-Central and Mountain regions receive slightly less under the current formula than they would under either of the alternatives.

TABLE 17

ALLOCATIONS BY CENSUS GEOGRAPHIC REGIONS

	School-Aged Population Allocation	Low-Income Population Allocation	Actual Allocation
Northeast	379.7	268.0	378.9
New England	93.7	55.9	67.2
Middle Atlantic	286.0	212.0	311.7
North-Central	473.5	330.5	367.4
East North-Central	338.0	219.8	262.4
West North-Central	135.5	110.7	105.0
Southeast	517.5	819.5	660.5
South Atlantic	247.1	344.7	295.6
East South-Central	107.5	212.0	162.9
West South-Central	162.9	262.8	202.0
West	282.8	235.5	246.7
Mountains	72.7	72.0	63.2
Pacific	210.1	163.5	183.5

OTHER COUNTS OF CHILDREN

In addition to the low-income children counted in the census, two other categories of children are counted in the formula: two-thirds of the children in families receiving high levels of payments under the AFDC program and all neglected, delinquent, and foster children.

AFDC Children

Children in families receiving high levels of assistance through Aid to Families with Dependent Children were defined in 1977 by dividing $5,040, the poverty line for a nonfarm family of four, by 12 to convert it to a monthly figure. The States provide HEW with the number of children aged 5 to 17 whose families received AFDC

payments higher than this monthly standard. The number of these AFDC children is reduced by one-third in calculating a county's eligible total. This standard does not vary with family characteristics; it is uniform for all families. Some of the children included in the States' counts might, therefore, come from large families that already qualify for counting as poor in terms of the Orshansky definition.

Of the three categories of children counted for Title I funding, the group defined by levels of AFDC payments is the second largest, though its size is steadily declining. In fiscal year 1976, this category accounted for 736,000 children; in fiscal year 1977, it included 589,000 children; and in fiscal year 1978, only 467,000 children. These AFDC eligibles are unevenly distributed throughout the country. Approximately 75% reside in five States: New York, Michigan, California, Illinois, and Pennsylvania. In contrast, these States contain only about a quarter of the children counted for Title I in the first category, the poverty eligibles. The percentage of total eligibles represented by the AFDC eligibles is a measure of the importance of AFDC counts to a State's allocation. AFDC eligibles represented the following percentages of total eligibles in fiscal year 1977: New York, 23%; Michigan, 26%; Illinois, 18%; Pennsylvania, 12%; and California, 10%. AFDC counts are clearly more important in these States than in most others, and, in general, help direct additional funding to urbanized States and toward urban areas within States.

The AFDC measure currently in use was prescribed by the Education Amendments of 1974; this law modified the previous measure in several ways. The AFDC eligibles are fewer compared with their status before 1974, when all children in families receiving more than $2,000 in AFDC benefits were counted. At the time the law was amended, there were actually more children counted in the formula as a result of the AFDC provisions than were counted under the census low-income provisions, which the statute then defined as a family income of $2,000. The 1974 changes also replaced the $2,000 definition of poverty with the Orshansky definition. This increased the number of children counted as poor from census data and caused a further reduction in the influence of AFDC counts on the Title I allocation. AFDC children com-

prised only 6.9% of the children counted in the formula in 1977. The effect of these and other changes was to measure the nonurban share of Title I resources slightly.[2]

The effect of AFDC counts on the allocation of Title I funds is shown by contrasting the actual allocation in fiscal year 1977 to an NIE estimate of what the allocation would have been had AFDC counts not been included in the formula (see Appendix I). The inclusion of AFDC counts raised the share of the nation's largest cities in 1977 by about $36 million. Their allocations are 8.5% higher than they would have been had the formula excluded AFDC counts. This national effect is in reality the net of different effects in each of the regions. The large northeastern cities gained $29.4 million, or 20% over what their allocation otherwise would have been. Their counterparts in the north-central region gained $13.0 million, or 12%; the large western cities gained $1.9 million, or 3%. Large southern cities lost $8.1 million, or 7.1% of what their allocation would have been, due to the AFDC counts.

The AFDC counts benefit other parts of metropolitan areas; the magnitude of the benefit is smaller than for large cities but still considerable. Nonmetropolitan areas in the aggregate lose an amount almost exactly equal to the gain of the large cities, but this loss is unevenly distributed. Allocations to nonmetropolitan areas in the Northeast, the East North-Central division, and the Pacific division are affected very little by AFDC counts.

Simulations were also conducted on a state-by-state basis. The allocation effect, at the state level, was analyzed by comparing allocations actually received by each State with what each of the States would have received had AFDC children been omitted from the formula entirely. The results are displayed for each of the nine census divisions in Table 18. Appendices I and J demonstrate, respectively, the effects by state, of both omitting AFDC children from the formula and of counting all AFDC children in families above the poverty cutoff.

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[2]Districts were protected against dramatic changes in their allocations by the "hold harmless" provision in the law, which assures that each LEA will receive at least 85% of its prior year's grant. These provisions have declined steadily in importance. In fiscal year 1977 only 1.2% of all counties in the United States were held harmless.

TABLE 18

EFFECTS OF INCLUDING AFDC CHILDREN IN FORMULA, BY REGION
($ in millions)

	Current	Omitting AFDC	Difference
Northeast	378.87	337.80	41.07
New England	67.17	64.09	3.08
Middle Atlantic	311.70	273.71	37.99
North-Central	367.42	352.64	14.78
East North-Central	262.41	242.66	19.75
West North-Central	105.01	109.98	-4.97
South	660.53	717.35	-56.82
South Atlantic	295.67	320.34	-24.67
East South-Central	162.87	177.26	-14.39
West South-Central	201.99	219.75	-17.76
West	246.67	245.70	0.97
Mountain	63.19	67.86	-4.67
Pacific	183.48	177.84	5.64

The inclusion of some AFDC children in the Title I formula benefits regions, such as the Northeast, that include States paying relatively high AFDC benefits. At the same time, Southern States, which have traditionally paid low benefits, lose funds when AFDC eligibles are included in the formula. This occurs under the constrained level of Title I funding, because the payment of AFDC entitlements means that less money is available for payment of non-AFDC entitlements. In addition to the entire South, the West North-Central, West South-Central, and Mountain divisions lose funding as a result of including AFDC eligibles in the formula.

As the state-by-state breakdown demonstrates, New York, Michigan, and Illinois (receiving almost $30 million, $14 million, and $10 million, respectively) gain the most from inclusion of AFDC eligibles. No other State gains more than $5 million. By contrast, Texas and Florida, which lose over $9 million and $5 million, respectively, are the largest losers. A number of other States, mostly in the South, lose approximately $4 million each.

Clearly, the jurisdictions that benefit from the inclusion of AFDC counts in the Title I formula receive less than they would if the counts were not reduced by one-third. Under full weighting of AFDC the Northeast would gain an additional $18.2 million (a 4% increase); the North-Central region $6.5 million, or about 2% more; and the West $0.4 million, or less than 1% more. The South would receive $25.1 million less than at present, a sum equivalent to about 4% of its current grant. Appendix J lists detailed figures by division and State on the results of full AFDC weighting.

Neglected, Delinquent, and Foster Children

Simulations were conducted to assess the effects of including neglected, delinquent, and foster children in the formula. Although the results are not as significant in dollar terms, the direction of the changes is similar: the Northeast gains $6 million as a result of the inclusion, while the South loses $10 million and the West South-Central division loses over $4 million. The allocation effects on the other census regions and divisions do not appear significant.

COST FACTOR

The state average per-pupil expenditure, or cost factor, provisions of the Title I formula are clearly an important element in the formula. Within each State, the cost factor determines the authorized funding level for each formula child. The cost factor helps make allowance for different educational costs as indicated by average expenditure levels.

The authorizing formula stipulates that each district shall receive, for each formula child, 40% of the APPE in the State in which the district is located. If that were the sole provision in the cost factor, the allocation effect, obviously, would be to reward States with high expenditures and to penalize low-spending States and, perhaps, encourage them to increase spending on education.

However, the statute also places limits on the rewards and penalties of the cost factor provisions by stipulating that no State will receive less than 80% nor more than 120% of the national average per-pupil expenditures. Hence, low-spending States are

brought up to a floor of 80% of the national average, and high-spending States are bound by the upper limits no matter what they spend.

Because appropriations fall short of the total authorization, the funding levels are ratably reduced. Nevertheless, allocations per eligible remain proportional to the cost factor, and in 1977 each county received approximately 16% of the APPE in its State. In that year, the 80% and 120% national boundaries meant that counties in the lowest spending States received $162 for each eligible child and, in the highest, $244 for each eligible. The cost factor is based on current expenditures per pupil in average daily attendance (ADA). The expenditures counted are state, local, and some Federal funds. These data are compiled by State Departments of Education and reported to National Center for Educational Statistics (NCES). The data currently in use refer to the 1974-75 school year.

NCES provides technical assistance to States in the preparation of their reports, and based on their experience, NCES personnel believe that the data used in funds allocation are reasonably reliable estimates.[3]

The cost factor affects LEA grants in two ways. First, it influences the size of the pool of funds available because the state agency grants for handicapped, migrant, and delinquent children are related to the same cost factor and are fully funded at 40% of the state cost factor. LEA grants are given from what remains after state agency and other grants are taken "off the top," so the size of the state agency allocation affects the size of the LEA grants.

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[3]The data, however, are far from perfect because States do not have uniform reporting or accounting systems. State contributions to educators' employee pension funds, for example, might be included in calculating average expenditures. In nine States, retirement programs accounted for more than 10% of current expenditures in 1974 (1974-75 expenditures were used in the 1977 allocation). On the other hand, retirement contributions accounted for less than 4% of state expenditures in several States. It is not clear that state contributions actually vary so markedly. It appears that some SEAs have accounting systems that enable them to identify such expenditures and others are unable to include such contributions because they are made by other state or local agencies.

Another difficulty encountered in the use of the cost factor relates to the definition of ADA. In accordance with the statute, OE asks States to report ADA "as defined by state law." Because States define the term differently--some, for example, count absent children with excuses--States with similar enrollments and expenditures might have different per-pupil expenditure figures.

After the size of the LEA pool is determined, the cost factor influences how LEA funds are distributed among the various States. If Title I used a cost factor that was constant for all States (for example, at 40% of the Nation's per-pupil expenditure), this would produce different county authorizations from those presently used and, after reduction, different county allocations. In comparison to a constant cost factor formula, the current variable cost factor formula produces higher authorizations for high-expenditure States, and lower authorizations for low-expenditure States. If a constant cost factor formula is the benchmark, the use of state per-pupil expenditures shifts funds from low-expenditure States to high-expenditure States, although the extent of the shift is limited by the 80% to 120% limits.

The effects of the use of a cost factor related to state expenditures, as compared to a nationally uniform cost factor, are displayed in Table 19. If a uniform cost factor were employed, the South would receive 14% more than it currently does, and every other region would lose funds. State-by-state comparisons of the effects of a uniform cost factor are displayed in Appendix K.

TABLE 19

COMPARISON OF UNIFORM COST FACTOR WITH CURRENT COST FACTOR
($ in millions)

	Uniform Cost Factor	Current Cost Factor	Difference
Northeast	311.60	378.87	67.27
North-Central	347.41	367.42	20.01
South	752.02	660.53	-91.49
West	242.45	246.67	4.22

The above data compare the effects of a state-related cost factor to a nationally uniform cost factor. By contrast, a second analysis compares the current cost factor, including its limits of 80% and 120% of the national APPE, with a state-related cost factor unconstrained by limits. This analysis, displayed by region in Table 20, leads to quite a different conclusion.

TABLE 20

COMPARISON OF UNLIMITED COST FACTOR
WITH CURRENT COST FACTOR
($ in millions)

	Unlimited Cost Factor	Current Cost Factor	Difference
Northeast	452.70	378.87	-73.83
North-Central	360.39	367.42	7.03
South	597.26	660.53	63.27
West	243.13	246.67	3.54

As the table demonstrates, the current limits on the cost factor reduce the amount the Northeast would get by 16%. The South benefits most from the use of the limits. The reason is fairly obvious: States in the South, such as Mississippi, in which expenditures are 58% of the national average, are raised to the floor of 80%. Table 21 separates States according to their cost factor as a percentage of the national cost factor. State-by-state comparisons of the current cost factor with an unlimited cost factor are listed in Appendix L.

Effects of Cost Factor on Place Types

Table 22 illustrates that the cost factor significantly affects the amount of Title I funding going to various types of places.

TABLE 21

STATE APPE AS PERCENTAGE OF NATIONAL APPE, 1974-75*

Less Than 80%		81%-90%		91%-100%	
Alabama	66	Arizona	90	California	98
Arkansas	62	Indiana	84	Colorado	96
Georgia	74	Louisiana	81	Florida	96
Idaho	74	Maine	81	Iowa	93
Kentucky	63	Missouri	84	Kansas	94
Mississippi	58	Nevada	89	Montana	100
North Carolina	78	New Hampshire	85	Nebraska	93
North Dakota	79	New Mexico	81	Vermont	98
Oklahoma	74	Ohio	86		
South Carolina	73	Virginia	88		
South Dakota	77				
Tennessee	72				
Texas	76				
Utah	76				
West Virginia	75				

101%-110%		111%-120%		Over 120%	
Hawaii	102	Connecticut	116	Alaska	178
Massachusetts	110	Delaware	113	New Jersey	133
Oregon	110	Illinois	115	New York	171
Washington	102	Maryland	116	District of Columbia	128
Wisconsin	105	Michigan	113		
Wyoming	104	Minnesota	115		
		Pennsylvania	112		
		Rhode Island	115		

*National APPE was $1,294. Appendix E displays each State's APPE and the amount per Title I eligible received in 1977.

TABLE 22

EFFECTS OF VARIOUS COST FACTORS
BY PLACE TYPE
($ in millions)

	Current Cost Factor	Uniform Cost Factor	Unlimited Cost Factor
Central city	$633.3	$599.1	$668.8
Large	460.6	422.6	501.5
Other	172.7	176.5	167.3
Other metropolitan	461.8	449.8	461.4
Urban	308.7	293.2	312.8
Rural	153.1	156.6	148.6
Nonmetropolitan	558.4	604.6	523.3
Urban	161.3	173.8	152.3
Rural	397.1	430.8	371.0

For example, large central cities on average receive nearly 10% more under the current formula than they would if a uniform cost factor were applied nationwide. If, on the other hand, the limits were removed for the cost factor, large central cities on average would receive almost 10% more than they currently do.

By contrast, nonmetropolitan areas would generally lose about 10% if a uniform cost factor were substituted in the formula, and they gain substantially from the limits in the current formula.

CHAPTER IV. SUBCOUNTY ALLOCATION

The Federal formula analyzed in the preceding chapters does not completely control the allocation of funds to school districts. If census and AFDC data are not readily available for school districts, States are authorized to apportion the Title I county allocations to the school districts within or crossing county boundaries. In making subcounty allocations, States possess broad discretion over the data they use; however, the data must further the purposes of the ESEA in directing funds to low-income areas.

The flexibility permitted States in selecting data sources for subcounty allocation provides an opportunity to use data more current than the census counts, which largely control the allocation of funds to the county level. In the past, House and Senate Committees have stressed the need for the use of current data in the subcounty allocation process so funds will be directed to areas with the lowest incomes within counties.

At the same time, the committees have always been interested in ensuring that similar districts are treated consistently, both within States and between States. In fact, the language of several committee reports implies that the data used to allocate funds to counties should also be used by OE or the States to allocate funds to districts.

As discussed in Chapter III, Title I funds appear to reach school districts in proportions that generally correspond to their numbers of formula-eligible children. Thus, for the country as a whole, the subcounty allocation process does not introduce large biases in the distribution of funds. Still, the flexibility afforded States in the subcounty allocation process might lead to very different results for individual districts. To investigate whether different state procedures or definitions of formula-eligible children systematically assist some districts at the expense of others, NIE funded a study of subcounty allocation designed to:

- Describe the current subcounty allocation procedures used by the States

- Identify the kinds of districts affected by different subcounty allocation procedures

- Examine alternative procedures for allocating Title I funds to school districts[1]

CURRENT SUBCOUNTY ALLOCATION PROCEDURES

County and school district boundaries coincide completely with each other in only four States: Florida, Maryand, Nevada, and West Virginia. Therefore, in these States and the District of Columbia subcounty allocation is not required.

In the remaining 46 States, the complexity of the subcounty allocation process varies. In Louisiana, subcounty allocation involves only two parishes (or counties) and four school districts. On the other hand, in Illinois, California, New York, and Texas, each SEA must arrange to allocate grants to 700 or more school districts within several hundred counties. Illinois alone has 1,040 school districts, only 10 of which are coterminous with county boundaries. Fully one-third of Illinois' school districts cross county boundaries; in each case, the SEA is required to allocate portions of two or more county grants to the same district. Nationally, 73% of Title I grants to LEAs are subject to state-defined subcounty allocation procedures.

Of the 46 States that must perform subcounty allocation, 24 chose to replicate the Federal formula in their subcounty allocation procedures.

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[1] More detailed reports on this study, prepared by the contractor, Applied Urbanetics, Inc., Washington, D.C., are available from NIE or Applied Urbanetics.

The principal interest in this study focused on the remaining 22 States that in 1976-77 used formulas or definitions of eligibility in subcounty allocation that differed from those used in the Federal formula. Ten of these States use formulas that emphasize 1970 census data and thus, are similar to the statutory formula. They are:

- Indiana and Virginia, which use 1970 census data alone
- Washington, which uses 1970 census data combined with annual state updates to reflect shifts in population
- Colorado, which combines 1970 census data with the total number of AFDC children
- Vermont and Connecticut, which use 1970 census counts combined with the total number of AFDC children above poverty
- Georgia, which uses 1970 census data plus one-third of total AFDC children
- Hawaii, which uses 1970 census data plus two-thirds of total AFDC children[2]
- Nebraska and Utah, which use 1970 census data plus total AFDC children

Five States--California, Massachusetts, Missouri, Montana, and Wyoming--ignore census data entirely and allocate county grants to districts solely on the basis of AFDC counts.

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[2]The entire State of Hawaii is technically one school district. However, Hawaii allocates its funds among several administrative units, which correspond to its four counties and to four areas of Honolulu.

Seven States use procedures or formulas that cannot readily be compared with the statutory formula. Alabama, North Carolina, and Louisiana do not use a statewide formula. Instead, within each county, school superintendents agree on the data source used to allocate funds within that county; data sources include free lunch counts, local school surveys, 1970 census data, 1960 census data, and AFDC counts. Superintendents in Alabama can use ADA, census data, and free lunch counts. Similarly, in North Carolina, superintendents apparently use census data, free lunch counts, and local knowledge of poverty concentrations. In Louisiana, a fixed-percentage allocation, which is still in use, was determined in the late 1960's, most probably on the basis of 1960 census data.

Arkansas utilizes current counts of AFDC children plus free lunch data; Delaware uses 1971 counts of AFDC children in families receiving more than $2,000 per year; and Arizona uses 1970 census data but counts only children at or below the poverty level of $3,000. Iowa uses counts prepared from state income tax returns coded by school district, and combines them with counts of AFDC children.

Iowa, like three of the States that replicate the Federal formula--Minnesota, North Dakota, and Oregon--reports that it ignores county boundaries entirely in making district allocations. For this procedure, frequently termed "substate" allocation, the State pools all county grants and allocates funds to each district based on its share of the State's eligible children. This practice violates the basic Title I statute and the regulations, but it could produce results wholly consistent with the intent of both if the data used closely reflect the incidence of formula-eligible children.

In summary, 24 States attempt to replicate the Federal formula in subcounty allocation; 10 States employ formulas similar to the Federal formula; 5 assign county grants among school districts solely on the basis of the districts' AFDC population; and 7 use poverty formulas unrelated to the Federal formula or procedures that differ among counties.

EFFECTS OF DIFFERENT SUBCOUNTY ALLOCATION PROCEDURES

To analyze the distributional consequences of different state procedures for subcounty allocation, actual district allocations as determined by current subcounty allocation procedures were compared with estimated allocations using a "standard" national formula. The standard formula chosen was based on counts of Orshansky poor children tabulated by the Bureau of the Census.

For subcounty allocation, use of this Orshansky standard is virtually equivalent to using the Federal statutory formula, if county statutory eligibles are distributed within counties in the same manner as Orshansky poor children, or if there are few noncensus eligibles in the county.

The analysis focused on the fiscal year 1976 allocations in 24 States. The States included 12 that used the statutory formula, 5 that relied heavily on census data, 4 that emphasized AFDC counts, and 3 that used other formulas. Within these States, the analyses were confined to districts that did not cross county boundaries and to unified and elementary school districts with enrollments greater than 300. The effects of different subcounty allocation procedures on urban areas and on areas with large concentrations of low-income children were of particular interest.

To describe the redistribution of funds that would occur as a result of a shift from current subcounty allocation procedures to the Orshansky standard, the dollar shifts among districts were summed to the state level and compared with the total of the State's Title I funds. Based on this analysis it appears that:

- In States that employ the statutory formula or a similar formula, generally less than 6% of the State's Title I funds are estimated to shift if the standard formula is compared with the State's subcounty allocation formula.

- The largest estimated shifts, between 10% and 16%, occur in States that use only AFDC or AFDC plus income tax data as subcounty formula components.

- States using markedly different definitions of poverty (e.g., income below $3,000) also shift considerable amounts of money.

More specifically, in the five States using only AFDC to perform subcounty allocation, the following estimated shifts occur: California, Missouri and Montana--11%; Massachusetts--8%; Wyoming--3%.

These shifts might result not because the State's reliance on AFDC data alters the allocation of funds within counties, but merely because the standard formula is not precisely like the statutory formula. However, three of the States--Missouri, Montana, and Wyoming--have so few noncensus eligibles that the standard formula is essentially the equivalent of the statutory formula.

In California and Massachusetts, on the other hand, the Orshansky poor children account for only 85% of the Title I-eligible population. In these two States, further analyses were performed to estimate the number of formula eligible AFDC children in each district. The findings in these analyses closely parallel the findings presented above.

Several States that do not rely solely on AFDC counts in subcounty allocation also experienced substantial shifts if the Orshansky standard is compared with their current procedures. In Iowa, which uses AFDC plus income tax, and Delaware, which uses the number of AFDC children in families with incomes greater than $2,000, the estimated shift is 16%. In Arkansas, which uses AFDC plus free lunch data, the shift is 8%.

Two States that use census data also have notable percentage shifts: Nebraska--12%, and Arizona--15%. Nebraska uses census plus AFDC for districts with enrollments over 300. However, because 90% of the districts have enrollments under 300 and, therefore, lack census data, Nebraska apportions county census counts by average daily attendance. Although Arizona uses only census data, the eligible poverty level is income under $3,000 rather than the Orshansky level.

District Changes

In addition to the magnitude of the shifts that would occur by State, the kinds of districts that would gain or lose funds in five specific States were examined. The results are shown in Table 23.

TABLE 23

CHANGE BY STATE FOR SELECTED TYPES OF DISTRICTS IF CENSUS-BASED SUBCOUNTY FORMULA SUBSTITUTED FOR CURRENT FORMULA*

	California (AFDC)	Massachusetts (AFDC)	Missouri (AFDC)	Delaware (AFDC $2,000)	Iowa (AFDC+ Income Tax)
Metropolitan central city	-	-	-	-	-
Nonmetropolitan, urban	-	-	-	-	-
Other metropolitan, suburban	+	0	+	+	+
Nonmetropolitan, rural	0	0	+	-	0
More than 20% poverty population	+	+	+	-	-
More than 30% minority population	-	-	-	N.A.	N.A.

*Key: + A majority of these districts gain 5% or more.
- A majority of these districts lose 5% or more.
0 A majority of these districts are relatively unaffected.

The data in the table support the commonly held belief that central city and urban districts are helped by subcounty formulas emphasizing total AFDC, while rural and suburban districts are favored by formulas emphasizing counts of census eligibles. In Massachusetts, California, and Missouri, the districts that would be aided by a shift to a census-based formula include the districts with the highest poverty concentration (as measured by census data). Districts with high concentrations of minorities in Missouri, California, and Massachusetts would lose funds if the current AFDC formula were dropped in favor of the census-based formula.

In brief, in States that emphasize AFDC data, a shift to a census-based formula would move money out of central-city, high-minority districts and into other types of districts. As much as 11% of Title I funds would be reallocated within counties in States relying solely on AFDC, and as much as 16% in States using AFDC plus other noncensus data such as income tax.

ALTERNATIVE SUBCOUNTY ALLOCATION POSSIBILITIES

Congress has voiced two major concerns about subcounty allocation. The first relates to a desire for consistent data and procedures, so districts will be treated the same wherever they are. The second concern is for current data that accurately reflect where the poor are located.

In theory, the flexibility allowed the States in choosing subcounty allocation criteria permits them to make use of more current data. In practice, 37 States use data no more current than that used by OE for county allocations.

Virtually any system that imposed greater consistency in the treatment of districts would require elimination of state discretion in selecting data and would change administrative responsibilities at the Federal and state levels.

NIE examined the feasibility of implementing four alternatives to the current subcounty allocation system. The first three would require imposition of a Federal formula; the last would permit States to allocate using their own formula. The four alternatives are:

- Subcounty allocation--OE would continue to calculate county grants, and States would continue to divide those grants; however, a uniform national formula would be used.

- Substate allocation--OE would calculate state grants, and States would use a uniform national formula for allocation to school districts.

- Direct (national) allocation--OE would calculate district grants using census data plus data submitted by the States; a uniform national formula would be used.

- Multiple formula substate allocation--OE would calculate state grants, and the States would select a formula for allocation to school districts.

The following discussion focuses on the data and administrative changes required to implement any of the four alternatives. The analyses presented earlier in this chapter are used to examine the consequences of implementing each.

Data Requirements for Alternative Procedures

Of the four alternative allocation procedures, the three requiring a single national formula would require additional data to be collected. The multiple formula, substate allocation procedure requires only data that States currently collect.

Census Data.--Census data generally pose a problem (regardless of district allocation procedure) in States where there are a large number of districts whose boundaries do not coincide with the boundaries of enumeration areas in any published census tabulations. Specifically, the OE special census tabulation by school district does not generally include data for districts wtih enrollments under 300. However, an examination of all published census tabulations showed that appropriate data are available for districts serving more than 98% of the Nation's enrolled students.

The most serious problem in attempting to use census tabulations to allocate funds to districts is that school district boundaries frequently split census enumeration areas. This problem affects 20% of the total enrolled population.

In a shift to using one of the single formula alternative procedures, the availability of census data would pose no problem in 35 States currently employing census-based formula components in subcounty allocation. These States have overcome the problems of census data availability by various estimation techniques. In the 11 States not employing census-based components, appropriate census data would need to be tabulated. For these 11 it was found that:

- In Massachusetts, Alabama, Louisiana, and North Carolina, reliable school district census data are available for at least 80% of all school districts from various census tabulations.

- In Arkansas, California, Delaware, Iowa, Missouri, Montana, and Wyoming, large proportions (as much as 40%) of districts have enrollments below 300 and boundaries that do not coincide with any census enumeration areas.

In a shift to using one of the single formula allocation alternatives, all of these States would need to tabulate census data for many of the school districts within the State.

Other Data.--AFDC data availability does not present any significant difficulties for any of the formula alternatives. Most States that would require AFDC data for the statutory formula already collect it. Only Indiana and Washington would have to institute new data-gathering procedures. Data on neglected and delinquent children are readily available for school districts because all institutions must submit an OE form that identifies the school district. Foster children data, however, appear to be universally difficult to collect, as well as unreliable. Only 20 States use foster children data in their formulas, and half of these estimate counts on the basis of census data.

Administrative Requirements

The management activities required to implement each of the four alternative procedures would vary. The most complicated procedure, in terms of Federal administration, would be the implementation of the direct allocation by OE.

Administrative processing by OE would increase substantially because there are five times as many school districts as counties, and the boundaries of those districts frequently change. Delays in allocations would be made more likely if a large number of local agencies did not complete their data collection on time. Also, OE would have to depend on States to gather the school district-level data for formula elements.

Under the substate allocation system using a single formula, OE would have fewer administrative problems because county counts of AFDC, neglected and delinquent, and foster children would not have to be obtained. The effort for the States would also be smaller because they would no longer have to collect county component data for districts that cross county boundaries. However, States that do not currently use census data or AFDC above-poverty data would initially have extra data collection activities, because they would need to tabulate and validate district-level data.

OE's responsibility would not change if a single formula were mandated for subcounty allocation. Most States' procedures would also remain unchanged, although States not now using the statutory data would have to collect it. As noted earlier, 11 additional States would need to estimate census data for many of their districts because their boundaries do not correspond with any census enumeration areas.

The fourth alternative, substate allocation using current subcounty allocation formulas, would reduce data gathering and grant calculation efforts both at OE and in the States. OE would no longer need to gather individual county counts of children in AFDC families, in foster homes, and neglected and delinquent institutions (although state welfare departments would still need county data to calculate state totals). State education agencies would no longer need county component data for districts that cross county boundaries. Otherwise, the state data-gathering efforts would be the

same as they are at present. OE grant calculations would be limited to approximately 50 States, while state education agencies would calculate the same number of school district grants as they calculate under the present system. However, their calculations would be simplified because whole school districts would be used in place of county components of school districts.

Effects of Alternatives

The analyses of the effects of the current subcounty allocation procedures provide a reasonable indication of what would happen if the formula alternatives were to be implemented.

Single Formula Subcounty Allocation.--For States currently using subcounty allocation formulas similar or identical to the statutory formula, the single formula alternatives would have negligible impact. They would, however, significantly affect the distribution of funds in States using formulas different from the Federal formula. The analysis of the differences between the effects of the current subcounty allocation procedures and the effects of the standard procedure indicated the kinds of districts that would gain or lose if the Federal formula were imposed for subcounty allocation purposes.

In brief, the impact of any of the single formula alternatives on the distribution of funds would be negligible in more than three-fourths of the States. However, in the several States currently using formulas emphasizing AFDC, as much as 16% of the States' Title I funds would shift. In general, this shift would be out of urban and high-minority districts and into other types of districts.

Statutory Formula Substate Allocation.--If the statutory formula were used for substate allocation, districts in States using the statutory formula or a formula closely resembling it would receive nearly the same allocations as they currently receive. The impact of shifting from the two-tiered subcounty system to the substate system was examined in a sample of 17 States. Twelve States in the sample currently use the statutory formula and five use a formula relying heavily on census data. No funding shifts greater than 0.5% were observed.

Multiple Formula Substate Allocation.--Similar analyses were conducted for three States that use AFDC counts for subcounty allocation and for four States that use other formulas. States using AFDC counts for subcounty allocation would generally experience significant funding shifts if AFDC were retained as the criterion in the substate allocation process. In California and Missouri, 8% and 17%, respectively, of the state allocation would shift. However, despite Massachusetts' dependence on AFDC data, it would experience a shift of less than 3% in substate allocations. Large central cities would gain considerably under substate allocation procedures emphasizing AFDC counts.

Only small funding shifts were observed in the four States that used formulas that did not rely on AFDC.

Currency and Consistency

Few of the subcounty formulas now used by States are both consistent and current. Those relying almost solely on census now use data collected 8 years ago. However, none of the alternatives discussed above completely meets the expressed desire of Congress that district allocation procedures be both consistent among States and use current data so poor children are properly located. In fact, requiring States that currently emphasize annual AFDC counts in their subcounty procedures to use a single formula emphasizing census data would force them to use older data. It would, however, increase the consistency with which districts in different States are treated.

CHAPTER V. ALLOCATION OF TITLE I FUNDS WITHIN SCHOOL DISTRICTS

The determination of the amount of Title I money to which a school district is entitled does not complete the allocation process. Having received a Title I grant, an LEA must determine the schools in which Title I-funded services will be provided and the level of Title I resources that will be allocated to each school. Although the Title I regulations are fairly explicit in defining the fiscal constraints under which Title I funds may be used in Title I schools, they permit LEAs considerable flexibility in determining which schools will provide Title I services and how much money will be allocated to each one. In fact, the regulations provide little guidance to LEAs about some of the most important decisions they are required to make during this process.[1]

This chapter focuses on the processes by which districts determine which schools will receive Title I funds, and how funds will be divided among recipient schools.

DETERMINING WHICH SCHOOLS WILL RECEIVE FUNDS

Determination of which schools will receive Title I services is a two-stage process. It involves:

- Identifying schools eligible for Title I, based on the poverty of the children living in the school's attendance area
- Selecting target schools to receive Title I services from among those determined to be eligible[2]

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[1] A more complete discussion of regulations governing the expenditure of Title I funds within Title I schools can be found in Administration of Compensatory Education, Washington, D.C.: National Institute of Education, September 1977, Chapter II.

[2] A complete description of the survey is included in Compensatory Education Services, Washington, D.C.: National Institute of Education, July 1977.

Determining School Eligibility

The basic requirement governing identification of eligible schools is that the selected school attendance areas must have high concentrations of children from low-income families. (The term "attendance areas" is used in the statute because all needy children living in a targeted attendance area are potentially eligible for services regardless of which school, public or private, they attend.)

An LEA can use one of several alternative measures of poverty to count the numbers of children aged 5 to 17 from poor families living in the LEA and in each attendance area. After counts of low-income children are established, each attendance area with a percentage of poor children at least as high as the average for the district can be regarded as eligible. Alternatively, the LEA can choose to rank attendance areas on the number rather than the percentage of poor children, deeming eligible those areas that have a number of poor children at least as high as the average attendance area in the LEA. The two methods can be used simultaneously. An LEA can declare schools eligible that have either large numbers or high concentrations of poor children, as long as the total number of attendance areas selected by the combined method does not exceed the number that could have been chosen by either method alone.

Whether the percentage or the number method is used to determine eligibility is only one of the factors that determine which of an LEA's attendance areas is eligible for Title I. Several additional procedures are also important.

The 3-Year Hold-Over Option.--This procedure, introduced by the Education Amendments of 1974, provided that a school attendance area that fails to meet the eligibility criteria, but that met such criteria and received Title I services in either of the 2 preceding fiscal years, shall be deemed eligible. The Congressional intent was to give continuity to Title I programs through substained eligibility.

Eligibility by Actual Attendance.--The Education Amendments of 1974 provided that an LEA could, at its discretion, deem eligible for Title I payments any school in which "the proportion of children in actual average daily attendance from low-income families is substantially the same as the proportion of such children in (an eligible

attendance area) of the agency." Thus, an attendance area in which large numbers of nonpoverty children live can be eligible if children from poor families constitute a high percentage of the children actually enrolled in school.

The "No Wide-Variance" Option.--Another option sometimes available to LEAs is the "no-wide-variance" rule, which provides that the entire school district can be regarded as an area having a high concentration of low-income children if there are no wide variations in the concentrations of such children among the several school attendance areas in the school district.

Thirty Percent Rule.--A final option is that an area with 30% or more of the children from low-income families can be designated as a project area. This rule reflects Congressional concern that inflexible targeting regulations could force some LEAs with very high incidences of poverty to declare schools with 30% low-income enrollment ineligible, while schools with only 10% low-income enrollment might be eligible in wealthier neighboring districts.

Poverty Measure Selection

Each of the foregoing regulations provides some latitude to districts attempting to determine which schools are eligible for Title I services. Even greater latitude, however, is permitted in the selection of measures of poverty to be used in determining school eligibility. A partial list of poverty measures that LEAs can employ is found in the U.S. Office of Education publication "Title I ESEA: Selecting Target Areas," and includes:

- Number of children whose families receive AFDC
- Number of children from families below poverty level according to the U.S. census
- Number of children eligible for daily free and reduced price lunch at school
- School surveys

- Health statistics
- Housing statistics
- Employment statistics

LEAs can use one or more measures, or any combination, but they must apply them consistently across schools.

Selecting Target Schools

Having developed its list of eligible attendance areas, the LEA must choose which schools it will "target"--that is, fund. The law and regulations impose two constraints on LEAs in choosing eligible schools.

One is the so-called "no-skip" provision, which, in general, prevents LEAs from delivering Title I services in a school attendance area unless all attendance areas with a higher percentage or number of children from low-income families are also served. Two important exceptions are recognized: an attendance area may be "skipped," if (1) the LEA can demonstrate that educational need is greater in other eligible areas that are ranked lower on the poverty criterion, and (2) similar services are funded in the attendance area by other Federal programs such as the Emergency School Aid Act, or by state and local funds.

The second constraint is the requirement that every Title I program be ". . .of sufficient size, scope and quality to give reasonable promise of substantial progress toward meeting (the needs of educationally deprived children)."

Resource Allocation to Targeted Schools

Having determined eligible schools and targeted specific schools from among those found to be eligible, each LEA must decide:

- Which categories of children to serve (i.e., which grade levels and what kinds of educational problems to address)

- How many children in each category to serve

- The amount of Title I funds that should be allocated for services to each child

The regulations provide little guidance about which educational problems at which grade levels should be addressed with Title I funds.[3] With respect to the second decision, the regulations require only that students "most in need of special assistance" shall be served. In making this decision, each LEA can choose its own criteria for identifying children in greatest need for compensatory education.

Finally, the regulations provide no guidance on allocation of funds among target schools. Districts can choose such diverse bases for allocation as the numbers of poor children, the numbers of low-achieving children, or, simply, the numbers of children they wish to serve. There is no requirement that funding be equal for each participating student. The regulations require only that programs concentrate on a "sufficiently limited number of services" for a "sufficiently limited number. . .of children."

The remainder of this chapter describes current district practices in determining Title I school eligibility, identifying target schools, and allocating resources among target schools. It relies on data collected by the NIE National Survey of Compensatory Education.[4]

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[3]Although Title I funds legally can be used at all levels of schooling, including pre-kindergarten, grades K through 6 are served more heavily than all others. A report prepared for NIE by the Stanford Research Institute advances some possible explanations for the Title I focus on elementary schools, and it presents a number of strategies for increasing compensatory education at the secondary level. See Meredith A. Jarson, et al. Better Basic Skills for Youth: Four Proposals for Federal Policy. Menlo Park, California: Stanford Research Institute, April 1977.

[4]The design of the national survey is described in Compensatory Education Services, Washington, D.C.: National Institute of Education, July 1977.

SCHOOL ELIGIBILITY

According to the survey results, school districts employ various poverty measures to determine which schools are eligible for Title I funds. Table 24 indicates the kinds of poverty measures currently used by school districts to count the number of poor children in school attendance areas.

TABLE 24

POVERTY DATA USED TO DETERMINE SCHOOL ELIGIBILITY

	Percent of Districts Using
1970 census data on family income	67
Free lunch and/or free breakfast counts (USDA)	66
AFDC children	51
Other economic data (e.g., public housing statistics, unemployment records, and district surveys of economic need)	34

The three sources of poverty information most commonly used to identify Title I-eligible schools are 1970 census data, current AFDC counts, and counts of free lunch recipients. At least seven other indicators are used occasionally. The fact that the entries in the table add up to far more than 100% indicates that many districts employ more than one source of data to determine school eligibility.

The regulations were written to allow districts to choose among several types of data because it was believed that no single data source was generally available; the survey results confirm that belief. In some areas, county welfare offices are apparently unwilling to help district administrators determine the number of children in AFDC families on a school-by-school basis. Therefore, AFDC data cannot always be used. Generally, 1970 census data is available only for large districts; even those districts have turned to other data sources as the census has become outdated. The number of free lunch recipients is the most readily available source of poverty data for most school districts.

Detailed analysis of the data also indicates that large urban districts are more likely than others to use AFDC counts or their own poverty surveys than census data in determining school eligibility.

The survey was used to examine the possibility that schools eligible according to one source of data might not be eligible if other data were used. The survey collected information on the number of poor children in all schools in the sample districts in 1975-1976 according to three measures: 1970 census, enrolled AFDC children, and free lunch recipients.

Table 25 illustrates the degree to which the numbers of children identified as poor by any one measure is correlated with the numbers identified by each other measure.

TABLE 25

ALTERNATIVE POVERTY MEASURES FOR
TITLE I SCHOOL ELIGIBILITY

	r
1970 census and AFDC	.58
1970 census and free lunch	.51
AFDC and free lunch	.81

In general, schools with high numbers of AFDC children are also likely to have high numbers of free lunch recipients. Other pairs of indicators (census and AFDC; census and free lunch) are less closely related. Thus, districts' choices of poverty indicators could have important effects on which schools they identify as eligible for Title I services. If districts changed their source of data for determining school eligibility, schools deemed eligible under the old criterion could be ineligible under the new, and formerly ineligible schools might become eligible.

NIE's survey data indicated that a very high proportion (68%) of the schools in Title I districts are classified as eligible. That rate of eligibility is far higher than

could be supported by any one eligibility criterion, as Table 26 demonstrates. Districts appear to be using two or more criteria, and calling schools eligible if they fit any one.

TABLE 26

PERCENT OF ALL SCHOOLS ELIGIBLE UNDER ALTERNATIVE POVERTY MEASURES*

	Percent
1970 census data	45.6
AFDC counts	44.5
Free lunch counts	47.6

*Any school with numbers of poor children above the district average was deemed eligible.

Table 27 shows the proportion of schools ineligible under one criterion but eligible under each of the others. If read with Table 26, it provides a likely explanation of the high eligibility rate observed by NIE's survey. Because only about 45% of the schools are eligible under any one criterion, more schools can be made eligible only by adding criteria. Table 27 shows that a district can increase its eligible school population quite dramatically by including schools eligible under one, but not another, criterion.

TABLE 27

PERCENT OF SCHOOLS INELIGIBLE UNDER ONE CRITERION BUT ELIGIBLE UNDER EACH OF THE OTHERS

	Eligible Under:		
Ineligible Under:	Census	AFDC	Free Lunch
Census	0	13.9%	14.7%
AFDC	6.7%	0	11.2%
Free lunch	10.3%	14.0%	0

Thus, it appears that districts use various combinations of criteria to select eligible schools; some districts might use different criteria for different schools and include as eligible all schools eligible under each criterion.

Districts also vary considerably in what is required to determine a "concentration" of poor children. One district in NIE's survey had so few poor children that an attendance area was counted eligible when only 2% of its children were low-income. In another, 77% of the children had to be poor for the school to be eligible.

Part of the discrepancy between the district reports of eligible schools and NIE's estimates might be explained by the exceptions permitted LEAs in determining eligibility. In particular, the 30% and "3-year hold harmless" exceptions discussed above can increase the number of schools determined eligible. Because these requirements had been in effect for barely a year when the survey was conducted, it seems unlikely that either would explain the entire difference.

The "no-wide-variance" exception, which would permit an LEA to deem all its attendance areas eligible, does not help explain the discrepancy. NIE's analysis took this possibility into account.

SCHOOL TARGETING

In theory, at least, the process of school targeting is distinct from determination of eligibility. To prevent spreading Title I resources too thinly, the regulations encourage districts to limit the number of eligible schools that actually receive Title I services. In fact, however, school targeting as a separate step is practically nonexistent. Over 80% of Title I districts report serving all eligible schools.

Nationally, according to the survey data, 94% of eligible schools are targeted for Title I services. Thus, little variation among districts and very little targeting actually takes place. This finding is particularly striking when considered in the context of the information presented above on the proportion of schools that are eligible for Title I. What these figures mean is that over 62% of all schools in Title I districts receive some Title I services.

ALLOCATING FUNDS TO TARGETED SCHOOLS

After target schools are identified, districts must still decide how much money will be allocated for Title I services. As noted above, the regulations provide very little guidance to LEAs in making this determination, beyond requiring that services be concentrated on a limited number of students in greatest need. Districts must make difficult decisions that balance the kinds and costs of services they wish to provide against the number of students they wish, or are able, to serve.

In making these resource allocation decisions, almost half the districts (45%) attempt to distribute Title I resources to match the number of students receiving Title I services in particular schools. Because student participants are selected on the basis of educational criteria, this means that the school districts allocate resources to schools roughly in proportion to their numbers of low-achievers, rather than of poor children. Other districts distribute their Title I funds in proportion to the number of low-income students in each target school. The rest of the districts use extremely vague rules for allocating resources, and the level of funding per child might vary substantially from school to school. Some district personnel speak generally about focusing on the "greatest educational need" or relating resources to the "severity of the problem." One district apparently decided to fund a program in one school because the school had an unused classroom that could be used for pullout purposes. Another asked school principals how many teachers they needed and negotiated among them until all were satisfied with the final decision.

CONCLUSION

The allocation of Title I funds within school districts is a loose process that varies enormously from place to place. The determination of which schools will receive Title I resources, and the amount they receive, is left almost entirely to the discretion of the local educational agencies. The determination of eligible schools depends to a considerable extent on the criterion for low income chosen by school district personnel. Districts now designate a very large number of schools as eligible to receive Title I services, and virtually all of these are targeted. Finally, there is no assurance that schools with the highest concentrations of either low-income or low-achieving children will receive the greatest amount of Title I resources, or that funds will be allocated in a consistent fashion.

CHAPTER VI. FORMULA DATA

During the 12 years since Title I was enacted, a number of criticisms have been made of the current funding formula, and changes have been suggested in the statistics used to compute entitlements and in the actual structure of the grant. This chapter concentrates on statistics that have been suggested for use in the Title I formula and their implications for funding patterns. The next chapter analyzes the structure of the current grant and whether Title I does result in additional spending on education at the local level.

Several efforts have been made since Title I was enacted to change significantly the statistics used in the formula. In 1974, for example, former Representative James G. O'Hara of Michigan proposed changing the population counted in the formula to reflect more closely the distribution of school-aged children rather than the distribution of low-income children alone. His suggestion was not approved.

Also in 1974, Representative Albert H. Quie of Minnesota suggested that counts of low-achieving children be substituted for counts of low-income children in allocating Title I funds. His proposal was also turned down, although the interest it generated led to the legislative provisions authorizing the NIE study. Another volume in this series of NIE reports presents the Institute's findings on the feasibility, costs, and effects of adopting the Quie alternative.

In 1974, after extensive discussion of alternative poverty definitions, the House and the Senate adopted a formula suggested by Representative John Brademas of Indiana that replaced the existing formula with the formula analyzed in this report. The Brademas formula changed the low-income definition used in the formula and resulted in a substantial change in the distribution of Title I funds. However, it continued to follow the principle that funds would be allocated in relation to numbers of low-income children residing in school districts.

Since Congress last debated the Title I formula 3 years ago, several studies have examined the data available for Title I allocation purposes. For the most part, these studies were the result of Congressional directives in the 1974 legislation and included:

- A study of the methodology for measuring poverty (The Measure of Poverty, Department of Health, Education, and Welfare, 1976)

- A survey of income and education designed to produce counts of children in poverty as of 1975 by State (Survey of Income and Education, SIE)

- A study, just completed, of methods of updating poverty counts, which focused on mathematical means of estimating changes in the poverty population

The following discussion draws on these studies and on NIE's investigations and examines: (1) the distributional effects of changing the poverty definition used in allocating Title I funds while continuing to allocate the funds to LEAs, (2) the consequences of using SIE data to allocate funds, and (3) the debate over how to measure poverty.

CHANGING THE POVERTY DEFINITION

In 1969, the Orshansky poverty standards were adopted by OMB as the official measure of poverty for the Government, and they are widely used in determining the eligibility of individuals for several Federal programs, including employment training programs. Considerable debate regarding the adequacy of the standards has developed from the concern that truly needy individuals might lose services because the official measure does not recognize them as poor. The debate is frequently technical in nature. Some argue that the standards are too low because, for example, the estimates of food consumption, on which the standards are based, date back to 1955 and are unrealistic. Others, however, point to the fact that the standards ignore in-kind income such as food stamps and claim the standards are too high.

This discussion clearly is significant for individuals interested in programs in which the beneficiaries' right to services depends on their poverty status. However, the effect on Title I is less immediate because the students' family incomes do not determine their eligibility or selection for Title I services. A change in the poverty standards, or in the income data to which they are applied, affects Title I only if such a change increases the counts of poor children in some LEAs at the expense of other LEAs. If the socioeconomic characteristics of the newly defined poor differ from those of the poor under the old definition, the characteristics of the population served with Title I funds are likely to be affected.

Raising the Poverty Definition

To study the distributional effects that would occur if the poverty definition was raised, NIE contracted with the Census Bureau for tabulations of the number of children counted as poor in counties and school districts using a number of different poverty standards. Among the different standards were two upward revisions that simply raised each of the existing 124 cutoffs used in the current measure of poverty, the Orshansky index, by 25% and by 50%.

These upward revisions have three main effects: (1) an increase in the number of children in families considered to be poor; (2) a change in the proportion of poor living in different areas; and (3) a decrease in the significance of the children counted under the AFDC, neglected, delinquent, and foster provisions of the formula. Table 28 presents simulations that suggest the impact of raising the poverty level by 25% and 50% on the regional distribution of poor children.

TABLE 28

REGIONAL DISTRIBUTION OF POOR
UNDER VARIOUS DEFINITIONS

	Current Orshansky	125% Orshansky	150% Orshansky
Northeast	16.2%	17.2%	18.1%
North-Central	20.0	20.9	22.2
South	49.5	47.5	45.0
West	14.3	14.4	14.7

The simulations indicate that a rise in the poverty level decreases the South's share of the Nation's poor, but the effects are not strong. A 50% increase in the poverty level, applied to 1970 census data, would cause a decrease of 4.5% in the South's proportion of the poor.

Increases in the poverty line would have practically no regional impact on the West. The North-Central States would gain 2.2%; and the Northeast, almost 2%. Within the Northeast, however, the redistribution would be substantial because New York would lose part of its share of the Nation's poor for each 25% rise in the poverty level. Thus, other Northeastern States gain as the poverty level rises. Pennsylvania has so many families just over the current poverty line that it would register substantial gains if the line were raised. Rises in the poverty level to 150% of Orshansky also reduce the share of the poor in California, Illinois, and Michigan.

Higher scalings of the Orshansky definition, though these are not seriously considered as poverty lines for Title I, were also simulated. Although the state-to-state impact is not the same when the definition goes from 150% to 200% as when it goes from 100% to 150% of Orshansky, the regional shifts are very similar: the South's share of the Nation's poor continues to decline, and the West continues to be little affected.

The effects, according to type of location, of raising the poverty level to 125% and 150% of the current definition were also examined, as shown in Table 29. The outcomes are quite distinct:

- The proportion of the poor in large central cities declines. The losses are most severe in the Northeast.

- Suburban areas increase their share of the poor when the poverty line rises.

- A rise in the poverty line reduces the nonmetropolitan share of the poor in the aggregate. However, as the regional table in Appendix M shows, nonrnetropolitan areas gain everywhere except in the South.

TABLE 29

PERCENT OF POOR CHILDREN, BY PLACE TYPE,
AT THREE SCALINGS OF ORSHANSKY FORMULA

	Current Orshansky	125% Orshansky	150% Orshansky
Central city	34.2	33.5	32.7
Large	23.4	22.8	22.1
Other	10.8	10.7	10.6
Suburban	26.7	28.0	29.7
Urban	17.0	17.8	19.0
Rural	9.7	10.2	10.7
Nonmetropolitan	39.1	38.5	37.6
Urban	11.2	11.3	11.3
Rural	27.9	27.2	26.3
Total	100.0	100.0	100.0

Modifications of the Current Definition

A number of technical revisions of the poverty standards have been proposed, most of which involve reducing the number of cutoffs from 124. Among the proposals considered by the Poverty Study Task Force was the use of newly available data on 1975 food prices and new estimates of families' dietary needs from the Department of Agriculture. A shift to 1975 food prices would raise the poverty lines. The use of the new Thrifty Plan developed by the Department of Agriculture would have some effect on the cutoffs for families of different sizes; however, because it was designed to have the same approximate cost as the food plan currently in use in the formula, the Thrifty Plan itself would not affect the poverty level significantly.

The elimination of the distinction between farm and nonfarm families was another proposal discussed by the Poverty Study Task Force. When the poverty lines were developed, Orshansky argued that because farm families grow some of their own food, they had less need for cash income than nonfarm families. Orshansky now argues

in favor of eliminating the differential because farm families buy major quantities of food. It is also argued that the differential is an unnecessary complication. Although that might be true with respect to determining poverty for program eligibility purposes, the distinction presents no particular difficulty for the tabulation of census data used in Title I.

Clearly, the elimination of this distinction would make more rural families eligible for counting as poor and, hence, would affect the distribution of Title I funds under constant funding levels.

The Poverty Study Task Force also considered modifications that would:

- Consider food costs as a more significant proportion of the budget in two-person families
- Provide for additional cutoffs for families larger than six persons
- Eliminate distinctions based on the sex of the family head
- Eliminate distinctions based on the ratio of the number of children to adults

NIE has simulated allocations with poverty definitions that incorporate several of these modifications. The findings indicate insignificant effects on the allocation of funds if any of these modifications were to be adopted individually. The general level of the poverty line, the role of other categories of eligibles, the particular cost factor used, and the full funding of state agency grants are all more significant determinants of the flow of Title I funds. The simulations suggest that any single technical change in the poverty definition would have an impact of between 5% and 10% in only a few counties. By State, these changes tend to average out.

"New Orshansky" Formula

In combination, however, several of these technical modifications might significantly affect the allocation of Title I funds. In fact, Mollie Orshansky has recently suggested several modifications, which include:

- Using 1975 food prices and the Department of Agriculture's new Thrifty Food Plan

- Using a multiplier of 3.4 rather than 3.0 on the assumption that the poor spend less than one-third of their income on food and that the existing multiplier results in a definition of poverty that is too low

- Eliminating the distinction between farm and nonfarm families

- Eliminating distinctions based on the ratio of children to adults

- Adjusting estimates of food costs as a proportion of total income to reflect family size

Table 30 shows the effect of the new Orshansky definition in terms of the distribution of low-income children.

TABLE 30

DISTRIBUTION OF POOR CHILDREN UNDER CURRENT DEFINITION OF POVERTY AND NEW ORSHANSKY DEFINITION

	Current Definition		New Orshansky	
	(Millions)	(Percent)	(Millions)	(Percent)
Northeast	1.25	16.2	1.98	17.2
North-Central	1.54	20.0	2.51	21.8
South	3.83	49.5	5.36	46.5
West	1.10	14.3	1.66	14.5
Total	7.72	100.0	11.51	100.0

The table shows that the new Orshansky definition has almost no impact on the percentage of the Nation's poor children living in the West. Although the proportion of the Nation's poor in each of the other regions does not change greatly under the definition, in a large-scale funding program the distributional effects would be significant. The principal cause for the change under the new Orshansky definition is the raising of the poverty level through the use of the new multiplier and 1975 food prices.

SURVEY OF INCOME AND EDUCATION

Poverty counts used in Title I are based on the 1970 census because it is the most recent statistical base for which relatively accurate counts of the poor are available for the entire country and for small areas. Even census income data are not entirely reliable, particularly for small areas, because only 20% of the population was asked about income in the 1970 census. Moreover, the 5- to 17-year-old children counted in the 1970 census are now 12 to 24 years old.

Although data more recent than the census have not been used for Title I allocations, it is clear that shifts in the distribution of the U.S. poverty population since 1970 have been significant. The major source of information on this subject is the Current Population Survey (CPS), a monthly sample survey that asks questions about income once a year. Data from the CPS have indicated that since 1970 the percentage of the Nation's poor in central cities has risen and that the percentage in nonmetropolitan areas and the South has declined somewhat. These data are of limited utility for Title I allocations because the CPS does not produce estimates of poverty for all States.

The Congress commissioned two studies in 1974 to deal with the problem of producing updated poverty counts for Title I. One of these, a study of the technical feasibility of various mathematical updating procedures, was reported in July 1977. The second, the SIE, surveyed 151,000 households in the spring and early summer of 1976. The SIE was the first large-scale national survey with the principal objective of obtaining data about family income status. It provides estimates at the state level

with a standard error of approximately 10% for most States.[1] SIE data have been used to produce, for each State, aggregate numbers of poor children living in central cities and other areas. The standard error of these estimates is higher than that associated with the state estimates.

Major Findings.--It was originally expected that the SIE would be combined with the March 1976 CPS to increase the precision of the estimated poverty counts. However, the estimates of children in poverty derived separately from the two surveys are so different that it might not be possible to pool the samples. Different procedures were used for the two surveys, and these appear to have led to drastically different results. The SIE estimate of children in poverty is surprisingly low: 7.132 million in 1976, which represents a substantial decrease from the 1970 census of 7.72 million. By comparison, the CPS estimate for 1976 is 8.2 million.

Poverty estimates appear to be very sensitive to the survey procedures designed to elicit household income information. It is acknowledged that the census undercounts most nonwage income, and it is possible that the reason for lower counts in 1976 than in 1970 was not a decline in poverty but rather more accurate income reporting in 1976. The CPS, with survey methods that were relatively consistent over time, shows a rise in poverty over the same period. Therefore, whether the number of children in poverty has declined since 1970 remains an open question.

The second key finding of the SIE is a shift in the distribution of the poor. Although the South continues to be the poorest region in the country, poverty distribution shifts from the South and the West North-Central States toward the Northeast and Great Lakes regions. Except Rhode Island, every State from Maine to Illinois was estimated to have a rise in the poverty rate among children aged 5 to 17 and an increase in the percentage of the country's poor children (in a period when population was growing faster in other regions). A corresponding decline was recorded in every Southern and Great Plains State but Florida. In many individual States and for census

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[1] A standard error of 10% means that the SIE estimates at the state level are likely to be within 10% of the correct figure two times out of three, and within 20% 19 times out of 20.

divisions as a whole, the differences in the share of the U.S. poor were statistically significant even with acknowledged sampling errors. The findings in the West were mixed. Except Nevada, the Mountain States all recorded lower poverty rates, but as the division rapidly gained population, its share of the country's poor rose slightly (from 4.37% to 4.61%). Poverty rates dropped substantially in Alaska and Oregon and rose in California and Washington.

SIE counts used in Title I allocations would have considerable effects (see Table 31). All Southern States except Florida, Texas, and Maryland would lose over 10% of their Title I funds. The West North-Central region would also be cut heavily. Illinois would gain the most in absolute terms. Many other States in the East North-Central, Middle Atlantic, and New England divisions would also gain substantially, as would several States with substantial immigrations--Florida, Arizona, and Nevada.

The limited size of the SIE sample means that SIE data can be used only to the state level for allocation purposes. SIE cannot provide accurate estimates for 1976 of children in poverty at the county, much less the district, level. Were Congress to decide, therefore, to use SIE data for allocation purposes, it would also need to establish a policy regarding whether States could allocate funds within their boundaries and, if not, what data they should use.

POVERTY MEASUREMENT

A formula such as Title I, which allocates funds on the basis of poverty counts, incorporates not only a set of poverty levels but also a definition of income to which these levels are applied. The appropriate income concept to be used in measuring poverty is the subject of considerable debate, as was shown in the preceding discussion of various proposals to amend the Orshansky poverty measure.

Two factors that complicate the measurement of poverty are "in-kind" income and geographical distinctions that might be drawn in measuring poverty.

TABLE 31

IMPACT OF SIE ON TITLE I FUNDING, SIMULATED FOR 1977
($ in millions)

	Actual FY 1977 Allocation	FY 1977 Allocation Based on SIE counts	Difference Amount	Difference Percent
NORTHEAST	380	417	37	10
New England	66	75	9	14
Maine	6	7	1	18
New Hampshire	3	4	1	32
Vermont	3	5	2	48
Massachusetts	32	35	3	9
Rhode Island	7	6	-1	-12
Connecticut	15	18	3	20
Middle Atlantic	314	342	28	9
New York	184	189	5	3
New Jersey	46	60	14	32
Pennsylvania	84	93	9	11
NORTH-CENTRAL	363	400	37	10
East North-Central	258	309	51	20
Ohio	52	58	6	11
Indiana	21	23	2	9
Illinois	88	115	27	31
Michigan	70	84	14	19
Wisconsin	27	29	2	6
West North-Central	105	91	-14	-13
Minnesota	25	25	--	--
Iowa	15	12	-3	-20
Missouri	31	29	-2	-4
North Dakota	5	3	-2	-34
South Dakota	5	4	-1	-24
Nebraska	10	8	-2	-24
Kansas	14	10	-4	-34
SOUTH	660	571	-89	-13
South Atlantic	295	274	-21	-7
Delaware	5	4	-1	-18
Maryland	28	28	--	--
District of Columbia	10	7	-3	-31
Virginia	39	31	-8	-21

TABLE 31 (Continued)

	Actual FY 1977 Allocation	FY 1977 Allocation Based on SIE counts	Difference Amount	Difference Percent
West Virginia	18	12	-5	-27
North Carolina	50	39	-11	-22
South Carolina	34	29	-5	-17
Georgia	50	44	-6	-11
Florida	61	80	19	31
East South-Central	163	122	-41	-25
Kentucky	34	30	-4	-12
Tennessee	41	34	-7	-16
Alabama	46	24	-22	-48
Mississippi	42	34	-8	-20
West South-Central	202	175	-27	-13
Arkansas	26	18	-8	-29
Louisiana	53	39	-14	-27
Oklahoma	19	15	-4	-21
Texas	104	103	-1	-2
WEST	248	265	17	7
Mountain	64	65	1	2
Montana	5	5	--	--
Idaho	4	4	--	--
Wyoming	2	2	--	--
Colorado	16	14	-2	-11
New Mexico	14	14	--	--
Arizona	15	18	3	17
Utah	6	5	-1	-13
Nevada	2	3	1	54
Pacific	184	200	16	9
Washington	19	21	2	11
Oregon	15	13	-2	-17
California	141	158	17	12
Alaska	3	2	-1	-23
Hawaii	6	6	--	--
United States total	$1,653	$1,653	--	--

Source: Section 822(a) Report to Congress.

In-Kind Income

A major issue in poverty measurement is the appropriate treatment of in-kind income (i.e., income in a form other than cash). Employee health plans, employer-paid educational programs, and home-grown food are all forms of in-kind income.

Since the poverty measure was first developed, a number of government in-kind programs have been either initiated or greatly expanded. Food stamps and medical assistance are the most extensive of these, but a significant number of low-income families also benefit from day care and legal services in addition to public housing and school lunches. All these programs are aimed at meeting the basic needs of poor people, and they provide benefits that in at least some cases replace direct cash expenditures.

Several recent studies have dealt with the effects of in-kind programs on the incomes of the poor. Much of the interest in the subject is due to the increasing role of the Federal Government in providing such benefits. Analysts resist the idea that the results of the Government's antipoverty programs should be ignored when the number of poor families are counted. Their desire to estimate the cash value of program benefits and add it to income is, therefore, understandable. With respect to Title I, on the other hand, such a redefinition of income could, if the distributional consequences were marked, take funds from areas in which the need for Title I-funded services was severe, i.e., areas with families receiving welfare, Medicaid, food stamps, and rent supplements.

Considerable controversy exists over how to determine the cash value of services or of in-kind benefits such as food stamps and rent supplements. However, it seems clear that if in-kind benefits were "cashed-out" at some reasonable rate, and incomes including these benefits were compared to the present poverty cutoffs, the Nation's poverty picture would be much changed. There are several reasons for thinking that the change would not be uniform and therefore would affect Title I allocations to a considerable extent. They include:

(1) Some areas do not have particular programs.

(2) Program eligibility rates differ from area to area.

(3) Participation rates among eligibles differ from area to area.

(4) The percentage of poor families whose incomes are near the poverty line, and susceptible to being raised over the line in-kind benefits, differs from place to place.

Food Stamp Adjustment.--As an example of the distributional consequences of placing a cash value on in-kind income, NIE used SIE data to determine the bonus value of food stamps, i.e., the difference between the cost of the stamps to an individual or family and the value of the stamps in the market. The bonus value of the stamps was then added to reported income to see how many children in families thus raised above the poverty line would be affected.

To conduct this analysis, a number of assumptions had to be made. The first assumption related to the annual bonus value received by families. SIE did not directly ask respondents how much their food stamps were worth for the year. Instead, the survey asked three questions: (1) For how many months did you receive food stamps? (2) How much did you pay for them last month? (3) How much were they worth last month? NIE assumed that the bonus value of food stamps for each month they were received was the same as in the month prior to the survey.

The second assumption was that 100% of the bonus value should be counted as income.

Of the 7.13 million children counted as poor in the SIE data, approximately 3% were removed from the analysis because individuals in the household other than the child's parent or guardian might have received the stamps. Of the remaining children, only 5.97 million are still classified as poor if the bonus value of food stamps is added to their families' incomes.

Some shifts in the distribution of the poor occur when food stamp value is considered as income in the SIE tabulations. With food stamps counted, the share of poor children living in the Northeast falls from 18.6% to 16.8%. At the same time, the

proportion living in the South increases from 43.4% to 45.5%. The other regions register smaller changes (see Table 32).

TABLE 32

REGIONAL SHARE OF POOR CHILDREN BY SIE DATA,
SIE WITH CRUDE FOOD STAMP ADJUSTMENT,
AND FISCAL YEAR 1970 CENSUS

	SIE	SIE With Food Stamp	Difference	1970 Census
UNITED STATES	100.0	100.0	0.0	100.0
Northeast	18.7	16.8	-1.9	16.2
New England	4.0	3.7	-0.3	3.4
Middle Atlantic	14.7	13.1	-1.6	12.8
North-Central	22.1	22.4	0.3	20.0
East North-Central	16.3	16.3	0.0	13.3
West North-Central	5.8	6.1	0.3	6.7
South	43.4	45.5	2.1	49.5
South Atlantic	19.6	20.8	1.2	20.8
East South-Central	9.8	10.5	0.7	12.8
West South-Central	14.0	14.2	0.2	15.9
West	15.8	15.3	-0.5	14.3
Mountain	4.6	4.8	0.2	4.4
Pacific	11.2	10.5	-0.6	9.9

Clearly, as shown by the food stamp example, cashing out in-kind income would affect the distributional patterns of programs such as Title I. Whether such a procedure should be employed is another question. Assuming that conceptually sound methods for placing cash values on all in-kind programs could be developed to refine poverty measurement, the result might not be the best measure to use in allocating Title I funds, because places where people rely heavily on government in-kind programs are also likely to be places where educational problems are severe. Moreover, with the exception of SIE data on the value of food stamps, there are no reliable data that permit poverty count adjustments for other in-kind programs.

Metropolitan Differentials

Another controversial question involves geographical differentials in the poverty line. Given that the poverty lines themselves are estimates based on minimal food costs, it is not apparent that a uniform standard of need should be applied to all areas. Currently the only geographical distinction in the poverty measure is the farm/nonfarm differential, which was meant to reflect not lower rural needs but, supposedly, greater rural resources: farm-produced food that supplements cash income. In fact, it is not really a geographical adjustment but an in-kind adjustment. Orshansky herself has recommended dropping this distinction.

A poverty measure with geographical differentials would use a different set of cutoffs in different places. Virtually any set of such adjustments would have extensive funding implications because the number of children counted as poor would remain constant, or perhaps fall, in some areas while rising in others.

The impact of geographical differentials in the poverty standard would depend on the actual differential used. In general, however, it appears that in most areas a 10% rise in the poverty level would raise poverty counts by 15% to 20% and that a 10% fall in the poverty level would have similar downward effects. (This generalization is based on special tabulations of the numbers of children counted as poor at 75%, 100%, and 125% of the current poverty line for all counties.) It follows that if a few places were assigned poverty levels 10% higher than the rest of the country, their funding might rise by 15% or more, even if the total allocation were fixed.

Due to the publicity given to such indicators as the Consumer Price Index (CPI), it is often assumed that cost-of-living indices already exist for most places, and that all that is needed to make cost adjustments in funding formulas is to extend data collection to a limited number of additional areas. In fact, nearly the opposite is true: minimally reliable cost-of-living indices are available for a relatively small number of areas, and even these are not strictly relevant to poverty measurement. The CPI, in fact, is not an interarea price index at all; it is designed to measure price level changes in a given area (for wage escalator purposes) relative to base year prices for that area.

More promising for the purpose of cost-of-living adjustments is the series of Family Budgets produced by the Bureau of Labor Statistics, the organization also responsible for the CPI. The Family Budgets are the cost of three different family consumption levels for a family of four including two parents. The lowest of the levels is well above the poverty line appropriate for such a family.

In the construction of the Family Budgets, attention has been given to the difficult problem of creating budgets that represent different consumption patterns (reflecting different local tastes and needs) but that represent comparable standards of living. However, the Family Budgets apply only to urban areas. In addition, they are calculated for only a limited number of metropolitan areas, and for small cities only by region.

The Poverty Study Task Force concluded that geographical adjustments could not be made at the present time. Although much of the data suggested higher living costs in metropolitan areas and outside the South, the Task Force did not find the evidence conclusive.

CHAPTER VII. TITLE I AND LOCAL SPENDING

INTRODUCTION[1]

Title I is a type of aid commonly referred to as a block grant, which means it provides lump-sum allocations to jurisdictions.[2] Unlike some general block grants, such as revenue sharing, which are intended in part to provide fiscal relief, Title I is a categorical grant. Funds are intended to purchase a particular type of special service, in this case for educationally disadvantaged pupils. Moreover, Title I funds are intended to supplement, and not replace, local revenues and are not supposed to be spent on services that a district would otherwise have purchased with local funds.

In cases where Federal block grants provide funds for an entirely new kind of service, it is relatively unlikely that the recipient will use them to replace local money; monitoring is easy because the existence of the new service is evidence that grant money has been properly used. However, monitoring is not as easy in a program like Title I. The local educational agencies that receive Title I grants already deliver instructional services of their own, and there is clearly some financial incentive for districts to fund as "compensatory programs" services that would otherwise have been provided from local revenues.

Title I, therefore, incorporates provisions intended to guarantee that grants are used to raise local expenditures and purchase special services, and not to replace local spending.[3] Some of these provisions, such as the maintenance of effort regulation,

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[1] The results reported in this chapter are based on the work of Martin Feldstein et al.

[2] At the state level, Title I has some characteristics of a matching grant, because the cost factor means allocations rise with higher state spending. However, an individual district's spending is unlikely to affect average state spending.

[3] For a full discussion of the regulations governing the use of funds by districts, see The Administration of Compensatory Education, Washington, D.C.: National Institute of Education, September 1977.

which Title I shares with many other block-grant programs, are difficult to enforce. Maintenance of effort regulations require districts to maintain their previous level of expenditures; in a period of inflation and rising educational spending, however, this does little to guarantee that Title I grant expenditures really represent additional spending.

Other provisions, however, constitute more direct restrictions on local spending behavior. For example, comparability regulations require that the level of state and local funds be approximately the same in schools that do and do not receive Title I funds,[4] and thus that Title I schools receive a large total amount of funds and services.

In addition, Title I restricts spending within schools, and requires that districts provide Title I children with the level of local funding and services ordinarily provided to other children and that Title I pay for only the "excess costs" associated with providing special services. These provisions sometimes have proven difficult to enforce, due in part to the lack of data on per-pupil expenditures. Nonetheless, they place additional limitations on districts' ability to use Title I dollars as tax relief.[5]

The effect of these regulations, some of which are now being added to other Federal education legislation, is to make Title I a "differential block grant" that, by mandating an observable difference in spending between two actual groups, provides a basis for monitoring and enforcement, and makes it more likely that local expenditures will rise (Feldstein, 1977). To see if this has in fact occurred, NIE commissioned a study to estimate how successful Title I has been in raising educational expenditures.

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[4]Specifically, each Title I school must have a teacher-pupil ratio and a level of spending on teacher salaries within 5% of the average for non-Title I schools.

[5]For a fuller discussion of the relative effectiveness of regulations ensuring that grants raise district spending, see Barro (1977). The regulations and the difficulty of implementing them are also discussed in Administration of Compensatory Education, Washington, D.C.: National Institute of Education, September 1977.

THE ADD-ON EFFECTS OF TITLE I

To assess the degree to which Title I grants increase education spending, an econometric study of the program's impact on district expenditures was conducted. The analysis was conducted on a large, national sample of school districts and focused on the degree to which Title I increases total current expenditures per pupil. The expenditures "per pupil" refers to all students in a district because data were not available with which to examine directly spending on different schools or on program eligibles.[6]

If the results of the analyses show that a dollar of Title I aid per pupil is associated with an increase in total per-pupil expenditures of one dollar, then the differential add-on requirements of Title I would appear to be fully effective in preventing the use of Title I dollars to displace local expenditures. However, if the increase in total local expenditure per pupil is close to zero, the add-on requirements appear to be ineffective. Table 33 lists the findings for Title I compared to other Federal aid and to state programs.

TABLE 33

EFFECT OF TITLE I AND OTHER AID ON LOCAL EDUCATION SPENDING (1970)

	Average Increase in District Spending per Dollar of Aid (standard errors in parentheses)*	
Title I	0.72	(0.12)
Other Federal aid	0.41	(0.04)
State aid	0.13	(0.02)

*Figures are regression coefficients from an analysis of district expenditures using multiple regression equations, estimated by ordinary least squares.

[6]Estimates are for 1970. The analysis is currently being repeated using newly available data for 1975. In 1970, some of the key regulations were not in effect; the intention that Title I be supplementary was, however, clear from the beginning.

The results suggest that an extra dollar of Title I aid raises local educational spending by 72 cents. The remaining 28 cents per dollar provides tax relief or allows jurisdictions to increase other forms of public spending. By comparison, other Federal aid, which includes a number of programs that vary considerably in their grant structure, increases total expenditures by 41 cents on the dollar. State aid, much of which comes in the form of unrestricted block grants, shows, on average, very little impact on total spending.

The analysis that produced these findings compared the spending patterns of similar districts in different States. The analysis was possible because district Title I grants are based not only on the number of formula-eligible children in the district, but also on the average per-pupil expenditure in the district's State. Hence, similar, or even identical, districts in different States can receive different Title I grants.

However, the very fact that Title I grants are higher in States with high average expenditures complicates the analysis because States with high average expenditures are likely to be those that include districts willing to subsidize education heavily from their own tax base. Hence, the average figure of 72 cents might be an overestimate of the degree to which Title I prompts increased spending. Part of the apparent effect on district expenditures of Title I funds might in fact result from the greater willingness of districts in some States to spend heavily on education regardless of the source of funds. It is impossible to separate exactly the effects of Title I funds from the effects of interstate differences. However, the analyses were repeated in a form that makes a specific allowance for possible state variations.

When the analyses were done this way, the Title I figure fell to 57 cents on the dollar. Thus, while it is impossible to determine the exact impact of Title I dollars, clearly about two-thirds of Title I grants are used for additional spending.[7] This is, of course, an average figure; the effects almost certainly vary in different types of districts (Feldstein, 1977).

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[7] There are no clear theoretical grounds for preferring one estimate to the other; for example, it is possible that one tends to overestimate and the other to underestimate the effect of Title I. However, the difference between the two estimates is of the same magnitude as their standard errors, indicating that a true value between 57 cents and 72 cents would be consistent with either.

The substantial increase in educational spending per dollar of Title I funds suggests that the Title I program has been effective in directing funds to new and additional educational spending. They do not, of course, show how this additional spending was distributed within the district. Nevertheless, the comparison with other programs suggests that the structure of Title I grants and the restrictions they place on district spending make Title I substantially more effective than most aid programs in raising local expenditures on education.

COMPARISONS WITH OTHER PROGRAMS

The analyses reported in this chapter are the first to examine the effects of a Federal categorical education program on per-student spending at the local level. However, they are generally consistent with studies of intergovernmental grants for other, noneducational, purposes. Analyses of Federal categorical block grants that fund new types of services in such areas as housing and transportation have generally found substantial effects at the local level (Gramlich, 1976). By contrast, block grants that do not place restrictions on the use of funds increase local expenditures less. In the case of Federal revenue-sharing funds, for example, probably between 25% and 40% of the money is used for additional spending (Nathan et. al, 1975; Gramlich, op. cit.).

These results tend to support NIE's finding that Title I is more effective in increasing educational spending than other Federal education programs, most of which restrict the use of funds less tightly. They would also appear to support the findings that general state aid has a more limited effect on local spending. NIE's data provides no information on the spending effects of state compensatory education programs.

However, the actual estimates obtained by NIE for state aid are considerably lower than those found by some other studies. NIE's results suggest that, on average, state aid raises district spending by only 13 cents on the dollar. Other analyses of particular States or state programs, e.g., by Cohn and Millman, generally have found that about a third of the aid is used for new expenditures. A more detailed study of California's block grants, conducted for NIE, also found that the State's equalization aid program affects local spending by about 30 cents to 40 cents on the dollar (Wise,

1977). While state aid is clearly less effective than Title I in raising spending, the national estimate should be treated only as an average.

MATCHING GRANTS

Finally, the effects of Title I were compared with those of matching grants, by which local or state expenditures are matched at a specified rate. Analysts generally expect that matching grants will raise expenditures more than those that provide lump-sum grants to jurisdictions. Most studies of Federal and state matching programs confirm this expectation, although a few have shown that some Federal matching programs have had a more limited effect on local expenditures. One study of a Federal matching program, in fact, showed that Federal welfare funds were used to replace local funds to a substantial degree (Gramlich, op. cit.).

NIE examined the effects of matching grants in education by obtaining data from Massachusetts, which has a grant system in which the matching rate varies among individual towns. The results suggest that almost none of the Massachusetts matching money is used to replace local expenditures at the district level.[8] Hence, in Massachusetts, matching funds raise local expenditures slightly more than Title I, in which perhaps one-third of the grant is not translated into extra spending.

However, no estimates can be obtained of the results of matching funds for compensatory services; no such program currently exists. Moreover, although matching grants would probably result in levels of spending equal to or higher than Title I's, they can be regressive in their effects. NIE's research indicates that if Title I were replaced by a program of equal size that matched overall expenditures, and matched them at a higher rate in the poorest districts, overall educational spending would probably increase. However, such matching grants are also likely to allocate more funds than at present to districts with low poverty rates (Feldstein and Friedman, 1977).

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[8] Specifically, the data show a price elasticity of about -0.9, meaning that if Federal matching funds provide 10% of the cost of education services, school districts will increase by 9% the amount they buy; their own expenditures will decrease very little.

CONCLUSION

Local school districts appear to increase their spending by a substantial fraction of the funds that they receive through the Title I program. Title I is more effective in raising educational spending than other Federal aid, or than state aid programs. Matching grants would probably increase spending more on average, but might be more regressive in their allocations.

CHAPTER VIII. TITLE I AND OTHER PROGRAMS OF AID TO EDUCATION

Chapter II examined the funding pattern produced by Title I and concluded that it was highly effective in directing resources toward areas with large numbers of low-income students. On those grounds it can be said that Title I is making an important contribution to the funding available for the students living in low-income areas.

However, a large number of other state and Federal programs provide aid for elementary and secondary education. Many of them direct funds toward areas that are considered needy by one standard or another. Though Title I is the largest single Federal program, the funding from either state and/or other Federal programs combined is several times that of Title I. It is possible that Title I does little more than modify very slightly the funding patterns of these other programs.

The purpose of this chapter is to determine whether Title I has a distinctive effect on the overall pattern of aid to elementary and secondary education. In doing so, it compares the patterns of aid to school districts produced by Title I with those associated with other Federal and state aid programs.[1]

Funding patterns are analyzed according to two quite different, though not mutually exclusive, criteria. The first is the degree to which Title I and other aid programs redistribute money to low-income districts. The second criterion is equalization: the degree to which Title I and other programs provide more money to places with low levels of local educational spending than to places with high per-pupil expenditures.

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[1] The analyses reported in this chapter were conducted jointly by NIE and the Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education, and Welfare. A forthcoming joint publication will provide detailed information on the individual allocation patterns of other Federal programs of aid to education, as well as Title I.

The two criteria are distinct because low-expenditure districts are by no means always districts with high concentrations of poor children. Many city school districts have large numbers of poor children, but also typically have high levels of per-pupil expenditure. Both criteria represent reasonable ways of defining the need for educational aid. The Title I statute favors the low-income (or redistributional) criterion; the analysis that follows will indicate the degree to which Title I is in fact redistributive in this respect and whether it produces funding patterns unlike other programs of Federal and state aid.

REDISTRIBUTION

Table 34 compares Title I and other programs according to the "redistributive" criterion.[2] To examine the average redistributive impact of different programs, districts were grouped by quartiles; that is, the 25% of districts with the highest percentage of children in poverty in 1970 were grouped together as the highest quartile, then the next 25%, and so on. Table 34 examines the level of aid reaching districts in all four quartiles for the entire United States.

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[2]The Federal programs examined here include only those providing funds for elementary and secondary education. Among the largest programs in recent years, other than Title I, have been School Assistance in Federally Affected Areas, which redistributes money to districts whose local tax base must provide for the education of Federal employees' children and Vocational Education. In the future, aid for the handicapped will probably be of increasing importance. The analyses reported here examine these programs as a group, rather than singly. However, the allocation patterns for a particular program might differ significantly from those of other Federal aid as a whole. The same is true of state aid, which in any given State might cover a wide range of programs from basic support to compensatory education, and which also varies greatly from State to State.

TABLE 34

TITLE I, OTHER FEDERAL REVENUE, AND STATE AID
TO DISTRICTS RANKED BY POVERTY

% of Children in Poverty (1970)	Average Title I Per ADM* 1974-75	Other Federal Aid 1974-75	Average State Aid Per ADM 1974-75
Highest quartile	$57.38	$138.49	$537.99
Third quartile	$42.92	$112.33	$583.08
Second quartile	$19.03	$ 65.02	$575.15
Lowest quartile	$10.34	$ 37.83	$513.87
Ratio of highest to lowest quartile	5.55	3.66	1.05

*Pupils in average daily membership.

Title I is markedly more redistributive than other state and Federal aid programs. Title I allocated more than five-and-one-half times as much aid per pupil to the districts with the highest poverty rates as to the lowest. The ratio for other Federal programs is three and one-half to one. Thus, Federal aid is generally redistributive, but Title I is distinctly more so than other Federal programs.[3] Because the total funds considered in the columns labeled "other Federal aid" and "state aid" far exceed Title I funding, the absolute figures in those two columns are nonetheless larger than for Title I at every district quartile.

[3]NIE also checked the redistributiveness of Title I against the 1975 statewide estimates of poverty counts provided by the SIE. Using this standard, Title I was still strongly redistributive. Other Federal programs, however, are far less redistributive when measured against 1975 poverty estimates at the state level than against 1970 census counts.

A recent study of aid programs in education, welfare, and other areas suggests that Title I might be the most redistributive of all Federal domestic programs providing funds to jurisdictions. In a paper by Hicks and Sarto (forthcoming), Title I funding was shown to have a correlation of -0.76 with county per-capita income.[4] Only the food stamp program came close to equaling this apparent redistributive effect.

By contrast, state aid programs are generally not redistributive. Although districts with the highest poverty rates receive about 5% more per pupil than those with the lowest, districts in the middle quartiles on average receive the most state aid.

The table above displays patterns aggregated by district for all States. However, States vary tremendously in the kinds of aid programs they provide, while the Title I cost factor means that districts with equal numbers of low-income children, but in different States, receive different amounts of aid. NIE, therefore, also examined the patterns of funds allocation within the States. The basic pattern held firm for Title I and other Federal aid. State aid proved to be slightly redistributive when analyzed on a within-state basis. It favored districts with the lowest poverty rates over those with the highest at a ratio of 1.2 to 1--still far less than either Title I or other Federal aid.

EXPENDITURE EQUALIZATION

NIE also examined the degree to which Federal programs assist low-expenditure areas. Districts were ranked in terms of their state and local revenues per pupil and again grouped into quartiles.

Table 35 demonstrates that both Title I and other sources of Federal aid are somewhat equalizing, but that neither is as effective in compensating for unequal state and local expenditures as in redistributing funds to areas with concentrations of low-income children. Though Title I in 1974-1975 gave more money to the lowest than to

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[4] A county's per-capita income is strongly correlated with its poverty rate.

TABLE 35

TITLE I, FEDERAL AID, AND OTHER PER-PUPIL EXPENDITURES: 1974-1975
(U.S. TOTAL)

State-Local Revenue per Pupil, 1974	Local and State Revenue	Title I 1974-75	Other Federal Revenue	Title I 1975-76
Highest quartile	$1,853.34	$28.51	$67.25	$26.83
Third quartile	$1,388.93	$37.34	$77.02	$36.36
Second quartile	$1,159.33	$27.73	$84.22	$31.29
Lowest quartile	$ 903.07	$35.35	$110.68	$43.32
Ratio of lowest to highest quartile	0.49	1.24	1.65	1.61

95

the highest quartile, it gave most to the third quartile. Even in fiscal year 1976, after the Title I formula had been amended and Federal compensatory education funds were allocated in a more equalizing fashion, Title I gave only 1.6 times more per pupil to the lowest than to the highest quartile.

The fact that an analysis of national Title I funding patterns does not reveal a major equalizing effect is not surprising. The "cost factor" in the Title I funding formula increases the funding that goes to high-expenditure States; thus, school districts will tend to receive higher Title I allocations the higher the levels of their state and local expenditures.

If, however, Title I funding patterns are examined within individual States, the counter-equalizing effects of the cost factor are eliminated. Table 36 displays the results of the within-state analysis. It shows that within States, Title I is considerably more equalizing than other sources of Federal aid. In fiscal years 1975 and 1976, Title I allocations per pupil were on average 1.7 times as high in districts in the lowest revenue quartile as in districts falling in the highest 25%. For other Federal aid, the figure is 1.1. Within States, then, Title I funding has a definite equalizing effect. Again, Title I funds have much stronger effects as instruments for redistribution than for equalization of expenditures.

Though Title I's funding formula is essentially a redistributive one, a program based on counts of low-income children is likely to have some equalizing effect. Many districts with a substantial number of low-income children are also spending relatively little on education, and vice versa. However, the relationship between poverty and expenditures is far from perfect, and modifications of Title I's poverty definition are unlikely to create major changes in its impact on expenditure inequalities. Of all the possible changes in Title I, eliminating the cost factor based on state average per-pupil expenditure would have the greatest effect. NIE's research on possible changes in other elements of the Title I formula indicates that giving special weight to districts with very high percentages of poor children would have an equalizing effect for a number of very low-expenditure districts, but would have little effect on the general pattern of the distribution of Title I funds.

TABLE 36

TITLE I FEDERAL AID AND OTHER PER-PUPIL EXPENDITURES:
WITHIN-STATE ALLOCATIONS

State and Local Revenue per Pupil	Local and State Revenue per ADM 1974-75	Title I per ADM 1974-75	Other Federal Revenue	Title I 1975-76
Highest quartile	$1,557.05	$26.39	$87.62	$27.74
Third quartile	$1,327.42	$30.24	$79.55	$31.99
Second quartile	$1,216.51	$29.05	$76.78	$32.62
Lowest quartile	$1,109.17	$44.13	$98.47	$46.94
Ratio of lowest to highest quartile	0.71	1.7	1.1	1.7

On the other hand, a Federal equalization program might well be significantly less redistributive than Title I. Under such a program, it is quite possible that a higher proportion of funds would go to those areas with relatively low poverty rates than is now the case. Funding for areas with large numbers of poor children would often also decline because cities with relatively high expenditure rates, but many poor children, would not benefit. In fact, NIE's analysis indicates that if the type of equalization formula[5] most often considered were to replace Title I, areas with poverty rates below 10% might be the greatest beneficiaries.

CONCLUSION

As a funding program, Title I's effects are distinctive. It is more redistributive than any other class of Federal and state programs. Though it is not meant to be a device for equalizing per-pupil expenditures among school districts, it does equalize to some extent.

Another way of looking at the distinctiveness of Title I is to examine the distribution of state and local aid among districts classified according to the size of their Title I grants. As Table 37 shows, state and local revenues do not favor the districts most aided by Title I. Title I is an important source of special help to these districts.

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[5]That is, a formula using national APPE the benchmark and taking into account current local tax rates and willingness to spend on education.

TABLE 37

LOCAL AND STATE REVENUES AND TITLE I GRANTS PER PUPIL

Districts ranked by size of 1974-75 Title I grant per-pupil:	State and Local Revenues
Across-State	
Highest quartile	$1,226.85
Third quartile	$1,183.22
Second quartile	$1,267.86
Lowest quartile	$1,417.16
Ratio of highest to lowest quartile	0.87
Within-State	
Highest quartile	$1,347.50
Third quartile	$1,219.16
Second quartile	$1,213.07
Lowest quartile	$1,316.95
Ratio of lowest to highest quartile	1.02

APPENDIX A. SECTIONS 821 AND 150 OF PUBLIC LAW 93-380

Public Law 93-380
93rd Congress, H. R. 69
August 21, 1974

An Act

To extend and amend the Elementary and Secondary Education Act of 1965, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Education Amendments of 1974".

PART B—EDUCATIONAL STUDIES AND SURVEYS

STUDY OF PURPOSES AND EFFECTIVENESS OF COMPENSATORY EDUCATION PROGRAMS

SEC. 821. (a) In addition to the other authorities, responsibilities and duties conferred upon the National Institute of Education (hereinafter referred to as the "Institute") by section 405 of the General Education Provisions Act and notwithstanding the second sentence of subsection (b)(1) of such section 405, the Institute shall undertake a thorough evaluation and study of compensatory education programs, including such programs conducted by States and such programs conducted under title I of the Elementary and Secondary Education Act of 1965. Such study shall include—

(1) an examination of the fundamental purposes of such programs, and the effectiveness of such programs in attaining such purposes;

(2) an analysis of means to identify accurately the children who have the greatest need for such programs, in keeping with the fundamental purposes thereof;

(3) an analysis of the effectiveness of methods and procedures for meeting the educational needs of children, including the use of individualized written educational plans for children, and programs for training the teachers of children;

(4) an exploration of alternative methods, including the use of procedures to assess educational disadvantage, for distributing funds under such programs to States, to State educational agencies, and to local educational agencies in an equitable and efficient manner, which will accurately reflect current conditions and insure that such funds reach the areas of greatest current need and are effectively used for such areas;

(5) not more than 20 experimental programs, which shall be reasonably geographically representative, to be administered by the Institute, in cases where the Institute determines that such experimental programs are necessary to carry out the purposes of clauses (1) through (4), and the Commissioner of Education is-

authorized, notwithstanding any provision of title I of the Elementary and Secondary Education Act of 1965, at the request of the Institute, to approve the use of grants which educational agencies are eligible to receive under such title I (in cases where the agency eligible for such grant agrees to such use) in order to carry out such experimental programs; and

(6) findings and recommendations, including recommendations for changes in such title I or for new legislation, with respect to the matters studied under clauses (1) through (5).

(b) The National Advisory Council on the Education of Disadvantaged Children shall advise the Institute with respect to the design and execution of such study. The Commissioner of Education shall obtain and transmit to the Institute such information as it shall request with respect to programs carried on under title I of the Act.

(c) The Institute shall make an interim report to the President and to the Congress not later than December 31, 1976, and shall make a final report thereto no later than nine months after the date of submission of such interim report, on the result of its study conducted under this section. Any other provision of law, rule, or regulation to the contrary notwithstanding, such reports shall not be submitted to any review outside of the Institute before their transmittal to the Congress, but the President and the Commissioner of Education may make to the Congress such recommendations with respect to the contents of the reports as each may deem appropriate.

(d) Sums made available pursuant to section 151(i) of the Elementary and Secondary Education Act of 1965 shall be available to carry out the provisions of this section.

(e)(1) The Institute shall submit to the Congress, within one hundred and twenty days after the date of the enactment of this Act, a plan for its study to be conducted under this section. The Institute shall have such plan delivered to both Houses on the same day and to each House while it is in session. The Institute shall not commence such study until the first day after the close of the first period of thirty calendar days of continuous session of Congress after the date of the delivery of such plan to the Congress.

(2) For purposes of paragraph (1)—

(A) continuity of session is broken only by an adjournment of Congress sine die; and

(B) the days on which either House is not in session because of an adjournment of more than three days to a day certain are excluded in the computation of the thirty-day period.

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"ALLOCATION OF FUNDS WITHIN THE SCHOOL DISTRICT OF A LOCAL EDUCATIONAL AGENCY

"SEC. 150. (a) For any fiscal year not more than 20 local educational agencies selected for the purpose of section 821(a)(5) of the Education Amendments of 1974 may elect, with the approval of the district-wide parent advisory council which is required to be established under section 141(a)(14) of this title, to allocate funds received from payments under this title on the basis of a method or combination of methods other than the method provided under section 141(a)(1)(A). Any method selected pursuant to this section shall be so designed and administered as to be free from racial or cultural discrimination.

"(b) Any local educational agency to which this section applies shall submit such reports to the Director of the National Institute of Education at such time and in such manner as the Director may reasonably require to carry out his responsibilities under section 821(a)(5) of the Education Amendments of 1974.

APPENDIX B. PROCEDURES FOR ALLOCATING FUNDS TO SCHOOL DISTRICTS

The calculation by the Office of Education of grants for LEAs under Part A would be relatively straightforward if two conditions existed: (1) appropriations for Title I fully funded the authorizations established by Congress, and (2) counts of low-income students (formula eligibles) were available for each LEA.

Under those circumstances each LEA would be entitled to a grant that would equal the number of formula-eligible children multiplied by 40% of the average per-pupil expenditure in the LEA's State (state APPE). Only two constraints on the LEA's entitlement would exist under these ideal conditions: (1) the state APPE would never be calculated at less than 80% of the national APPE, nor at more than 120% of the national APPE; and (2) an LEA would never receive less than 85% of its allocation in the prior year.

In practice, neither condition exists, and the procedure is a great deal more complicated. Except for the first year, Title I has never been fully funded, and counts of low-income students by LEAs are available for only a few States. The first problem, inadequate funding, means that LEA grants have to be adjusted until they total the amount of money available (by means of a ratable reduction). The second, inadequate data at the LEA level, means that OE rarely calculates an LEA grant; instead, it calculates grants to counties, leaving States the task of allocating county grants to LEAs. The Office of Education is able to compute "county grants" because counts of eligible children (census poor and children in families receiving assistance under the Aid to Families with Dependent Children program) are available at the county level.

PROCEDURE FOR FORMULA ALLOCATION TO COUNTIES

The precise amount allocated to each county is computed in two steps. First, a formula is used to calculate county "entitlements," which would be distributed to the

LEAs if Title I were fully funded at the amount authorized. Because the allocation available for LEA grants falls far short of the total county entitlement, in the second step they are reduced until they equal the money actually appropriated by Congress. All entitlements are reduced by the same percentage (ratable reduction) except that no county may receive less than 85% of its previous allocation. The formula for computing entitlements is as follows:

- The number of formula eligibles is calculated. For each county the total number of resident children in each of three categories is identified, and the totals for the three categories are added. The categories are as follows:

  (1) The number of children aged 5 to 17, inclusive, from families below the poverty level on the basis of the most recent satisfactory data available from the Department of Commerce

  (2) Two-thirds of the number of children aged 5 to 17 from families receiving payments under AFDC greater than the current poverty level for a nonfarm family of four

  (3) The number of children aged 5 to 17--being supported with public funds--who live in foster homes or in institutions for neglected or delinquent children and depend on the local educational agency for educational services (Institutions served by state agencies are eligible for full funding under the Part A state agency set-aside.)

- The second part of the formula is the "cost factor." Title I, at full funding, would provide an additional 40% of educational funding for each eligible child. The cost factor is based on this ratio of 0.4 on each State's average current expenditure per

pupil and on the national average, which is used to set maximum and minimum rates.

(1) If the state APPE is less than 80% of the national APPE, then the cost factor is 0.4 times 80% of the national APPE.

(2) If the state APPE is greater than 120% of the national APPE, then the cost factor is 0.4 times 120% of the national APPE.

(3) If the state APPE is between 80% and 120% of the national APPE, then the cost factor is 0.4 times the state APPE.

Table B-1 summarizes the way each county's allocation is computed.

TABLE B-1

PROCESS OF COMPUTING EACH COUNTY'S ALLOCATION

Entitlement = (P + AFDC + NDF) x .4 SAPPE
(1st multiplier, 2nd multiplier)

Allocation = Entitlement x CA

P	=	Number of children from poor families defined by U.S. census (Orshansky index)
AFDC	=	.67 children from poor families receiving AFDC payments above poverty
NDF	=	Children in institutions for the neglected and delinquent and in publicly supported foster homes
SAPPE	=	State APPE (within limits)
CA	=	LEA share of Congressional appropriation as a proportion of entitlement sum (.393 in 1975-77)

PROCEDURES FOR SUBCOUNTY ALLOCATION TO LEAs

After the entitlements are ratably reduced, each LEA is notified of the amount that it and the counties of the State are eligible to receive under Title I. In the few States in which counties are coterminous with LEAs, this procedure results in OE's calculating allocations to the LEAs.

However, in most States, county and LEA boundaries do not coincide, and the States are responsible for allocating Title I funds to districts within county boundaries or to districts crossing county boundaries. This procedure frequently is termed "subcounty allocation." The rules governing subcounty allocation by LEAs are described below.

The Title I statute does not provide unlimited discretion to the SEAs with respect to the subcounty allocation of Title I funds. The statute provides that the county allocation " . . . shall be allocated among those (local educational) agencies upon such equitable basis as may be determined by the State Educational Agency in accordance with basic criteria established by the Commissioner."

The criteria established by the Commissioner set forth in the regulations generally provide that the SEA must suballocate the Title I funds on the basis of available data which it considers best reflect the current distribution of eligible children from low-income families.

PROCEDURES FOR ALLOCATING FUNDS WITHIN SCHOOL DISTRICTS

Having received a Title I allocation, an LEA must select schools <u>eligible</u> for Title I-funded services, <u>target</u> specific schools from among those deemed eligible, and determine which <u>students</u> within those schools will receive services. A brief discussion of these procedures follows.

<u>Choosing Eligible Schools</u>

The basic requirement governing selection of eligible schools by the LEA is to choose school attendance areas that have high concentrations of children from low-

income families. The term "attendance areas" is used in the statute because all needy children living in a targeted attendance area are potentially eligible for services regardless of which public or private school they attend. Other provisions of the law, as well as OE regulations, serve to interpret and explicate this basic requirement.

Basically, an LEA is required to select one or several measures of poverty to determine the number of children aged 5 to 17 from poor families residing in the LEA as a whole and in each attendance area. Each attendance area with a percentage of poor children at least as high as the average for the district is eligible; alternatively, an LEA can choose to rank areas based on the number rather than the percentage of poor children, deeming those areas eligible which have a number of poor children at least as high as the average attendance area in the LEA. Both methods may be used simultaneously. An LEA may declare schools eligible which have either large numbers or high concentrations of poor children, as long as the total number of attendance areas selected by the combined method does not exceed the number that would have been chosen by using only one method.

Choosing between the percentage and the number methods to award eligibility status to attendance areas is only one of the major criteria for determining which of an LEA's attendance areas is eligible for Title I. Several additional procedures are also important.

The 3-Year Hold-Over Option.--This procedure was introduced by the Education Amendments of 1974 and provided that a school attendance area that fails to meet the eligibility criteria, but that met such criteria and received Title I services in either of the 2 preceding fiscal years, shall be deemed to be eligible. The Congressional intent was to give continuity to Title I programs through sustained eligibility.

The Selection of Poverty Measures.--When LEAs apply to SEAs for funding, they may, with SEA approval, have the freedom to select the measure or combination of measures that will define poverty levels for the various school attendance areas. A partial list of the poverty measures LEAs may employ is found in the OE publication "Title I ESEA Selecting Target Areas" and includes:

- Number of children whose families receive AFDC
- Number of children from families below poverty level according to the U.S. census
- Number of children eligible for daily free and reduced price lunches at school
- School surveys
- Health statistics
- Housing statistics
- Employment statistics
- Other

LEAs can use one or more measures, or any combination of measures, but they must apply these measures consistently across schools.

Eligibility by Actual Attendance.--The Education Amendments of 1974 provided that an LEA could, at its discretion, deem any school eligible for Title I payments if "the proportion of children in actual average daily attendance from low-income families is substantially the same as the proportion of such children (in an eligible attendance area) of that agency."

The amendments reflect a Congressional concern that, in an attendance area in which children of poor families constitute only a small percentage of children resident in the area, but in which large numbers of nonpoverty children do not attend the local schools, the attendance areas would be deemed ineligible despite the fact that the children of poor families constitute a high percentage of the children in actual attendance. The amendment enables such a school to be eligible for Title I funds.

The "No-Wide-Variance" Option.--Another option sometimes available to LEAs is the "no-wide-variance" rule:

> In certain cases, the whole of a school district may be regarded as an area having a high concentration of . . . children (of low-income families) and be approved as a project area, but only if there are not wide variances in the concentrations of such children among the several school attendance areas in the school district.

Thus, if an LEA can establish to the satisfaction of its SEA that there are "no-wide-variances," all attendance areas become eligible. Under the new regulations, the standard is that the variation between the highest and lowest percentage of children from low-income families is not more than one-third the average of low-income children for the district as a whole.

Thirty Percent Rule.--A final option, formerly described in "Title I ESEA Selecting Target Areas" and currently appearing in the revised 1976 regulations, is that with the approval of the SEA ". . . an area with 30% or more of the children from such (low-income) families may be designated as a project area." This rule apparently originated following expressed Congressional concern that inflexible targeting regulations could result in an LEA with a high incidence of poverty declaring schools with 25% or 30% low-income enrollment ineligible, although a neighboring district with a lower incidence of poverty might declare a school with only 10% low-income enrollment eligible.

Selecting Schools

Having developed its list of eligible attendance areas, the LEA must choose which schools it will "target"--that is, fund. The law and regulations impose two constraints on LEAs in choosing which of the eligible schools to fund.

One is the "no-skip" provision, formerly articulated by OE in Program Guide #44, Section 4.6, and presently appearing in the 1976 revised regulations. In general, the "no-skip" provision stipulates that an LEA cannot designate that an eligible school attendance area be served by a program unless all attendance areas with higher percentages or numbers of children from low-income families have been so designated.

The new regulations provide that an attendance area need not be targeted, i.e., it may be "skipped," if the LEA can demonstrate that educational need is greater in other, lower ranked eligible areas.

The second constraint is the requirement that every Title I program be ". . . of sufficient size, scope, and quality to give reasonable promise of substantial progress toward meeting (the needs of educationally deprived children)."

Student Eligibility and Selection

Although attendance area eligibility is determined by economic criteria, student eligibility is based on low achievement, described by existing regulations as: ". . . those children who have need for specific educational assistance in order that their level of educational attainment may be raised to that appropriate for children of their age."

The final step in the process is the selection of children to be served from among those who are eligible and the determination of the amount and type of service each should receive. Specifically, the regulations provide that:

> The project for which an application for a grant is made by a local educational agency should be designed to meet the special educational needs of those educationally deprived children who have the greatest need for assistance.

Program Requirements Designed To Ensure That Title I Is an "Add On"

A school district might spend every penny of its "Title I money" on "Title I projects" without Title I children reaping the full benefit of the additional funds--its share of locally provided services could simply be reduced, so that, in effect, some of the aid goes to other children or back to the taxpayer. This is a problem in all grant programs, hardly unique to Title I. An elaborate set of requirements, however, is designed to prevent this diversion of effort. These requirements include:

- Maintenance of effort requirements--intended to prevent LEAs and States from reducing their level of expenditure per pupil and using Title I to compensate for the difference

- Comparability requirements--intended to ensure that the services provided to the target population are comparable (i.e., approximately equal) to the services provided to nontarget populations before the addition of Title I services

- General aid prohibitions--intended to ensure that Title I funds are used as categorical aid to meet the needs of educationally deprived children and not used for the general needs of the schools or the student body at large

- Supplanting requirements--intended to ensure that: school attendance areas and children participating in Title I programs are not penalized in the provision of state and local funds because they are receiving special assistance under Title I; Title I funds may only be used to pay for the excess cost of programs; and in no case may Title I funds replace state and local funds that would be provided but for the existence of Title I or be used to pay for services which are ordinarily provided in nonproject areas with state and local funds

APPENDIX C

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
Elementary and Secondary Education Act of 1965, P.L. 89-10 As Amended
Title I Assistance for Educationally Deprived Children
Allotments for Fiscal Year 1977

	PART A								PART B - $24,769,000		GRAND TOTAL	
	Local Educational Agencies	Handicapped Children	Juvenile Delinquents	Adult Correctional Institutions	Neglected Children	Migrant Children 1/	Administration	Total Part A	Special Incentive	Administration	Total Administration	Grand Total
TOTALS	1,721,130,372	111,633,651	19,056,654	7,833,615	1,952,882	130,900,832	21,185,411	2,013,500,217	24,523,762	245,238	21,430,649	2,050,000,000
ALABAMA	44,786,457	656,016	199,129	39,363		711,306	463,923	46,856,194			463,923	46,856,194
ALASKA	3,422,869	1,491,880	86,993				137,376	5,139,118	1,762,639	12,626	150,000	6,414,381
ARIZONA	15,716,951	592,077	299,156	35,224		3,244,290	199,077	20,106,775	672,360	6,723	205,800	20,795,844
ARKANSAS	25,468,518	1,355,677	199,592	90,775		1,982,850	290,975	29,388,487			290,975	29,388,487
CALIFORNIA	139,880,257	3,263,228	1,468,082	280,885		24,985,585	1,698,580	171,556,617			1,698,580	171,556,617
COLORADO	16,880,642	1,695,827	157,451	24,754		1,721,391	184,891	18,664,868	197,478	1,975	186,776	18,864,321
CONNECTICUT	16,108,837	1,771,324	305,494	408,828	49,780	1,232,389	196,721	19,873,823			196,721	19,873,823
DELAWARE	4,326,169	930,718	158,191			315,216	148,909	5,879,133	109,115	1,091	150,000	5,989,339
FLORIDA	59,826,824	2,478,095	621,467	582,567		16,912,200	802,212	81,023,365			802,212	81,023,365
GEORGIA	48,424,650	972,781	485,318	247,125		1,050,310	511,897	51,701,581			511,897	51,701,581
HAWAII	5,397,993	381,663	25,872	5,116			150,000	5,960,644			150,000	5,960,644
IDAHO	4,079,797	239,465	58,739	32,718		2,356,857	150,000	6,916,580			150,000	6,916,580
ILLINOIS	89,121,443	9,775,286	568,153	103,530	120,981	859,449	1,005,444	101,549,806			1,005,444	101,549,806
INDIANA	22,641,592	2,344,621	287,485	233,526	179,479	1,004,406	268,462	27,116,681			268,462	27,116,681
IOWA	15,250,265	756,184	131,305	103,998	83,128	106,605	164,313	16,595,598			164,313	16,595,598
KANSAS	13,234,019	1,107,450	152,562	85,209		646,474	152,257	15,377,971			152,257	15,377,971
KENTUCKY	34,713,991	958,674	176,428	77,032		1,933,666	378,098	38,187,889			378,098	38,187,889
LOUISIANA	51,287,225	2,161,190	439,472	27,102		502,854	544,178	54,962,021	1,088,768	10,887	555,065	56,061,676
MAINE	6,526,318	730,816	129,202	46,180		728,388	146,486	8,307,390	351,394	3,514	150,000	8,662,288
MARYLAND	29,463,487	2,185,631	505,279	231,967		950,419	333,368	33,670,151	508,483	5,085	338,453	34,183,719
MASSACHUSETTS	32,130,414	6,620,715	382,486	132,881		1,562,339	408,688	41,257,323	1,001,060	10,011	418,699	42,268,384
MICHIGAN	72,302,647	7,354,557	338,026	701,286	16,432	4,668,479	854,719	86,326,646	3,678,564	36,786	891,505	90,041,996
MINNESOTA	26,285,705	777,402	319,131	190,938		969,741	285,429	28,828,346	3,040,674	30,406	315,835	31,899,426
MISSISSIPPI	42,869,685	619,613	250,069	90,285		1,829,715	456,594	46,115,961			456,594	46,115,961
MISSOURI	30,687,202	2,134,901	310,733	106,974		1,095,286	343,351	34,678,447			343,351	34,678,447
MONTANA	5,254,480	372,368	98,955	2,062		872,462	143,095	6,743,422	690,451	6,905	150,000	7,440,778
NEBRASKA	9,100,166	345,267	88,450	28,526	22,241	289,431	150,000	10,024,081			150,000	10,024,081
NEVADA	2,089,667	361,274	105,121	28,989		92,490	150,000	2,827,541			150,000	2,827,541
NEW HAMPSHIRE	2,803,560	677,430	84,282				150,000	3,715,312			150,000	3,715,312
NEW JERSEY	47,978,659	4,677,050	739,831	54,300		2,279,346	557,292	56,286,478	1,722,333	17,293	574,585	58,033,106
NEW MEXICO	13,391,548	394,923	137,075	36,722		2,427,294	163,875	16,551,407	2,376,339	23,763	187,638	18,951,500
NEW YORK	180,523,103	11,275,585	2,771,434	778,015		3,021,614	1,981,698	200,353,449	3,678,564	36,786	2,020,484	204,068,799
NORTH CAROLINA	51,885,667	3,295,736	773,823	444,383		2,592,579	589,922	59,582,110			589,922	59,582,110
NORTH DAKOTA	4,664,858	294,526	58,812	23,154		762,709	150,000	5,954,059			150,000	5,954,059
OHIO	51,107,975	5,360,256	884,390	142,819	131,981	1,516,620	593,440	59,937,461			593,440	59,937,461
OKLAHOMA	20,301,200	697,233	171,872	204,686	253,460	791,026	224,195	22,643,692			224,195	22,643,692
OREGON	14,709,272	1,973,301	450,945	90,875		2,649,088	198,735	20,072,216	859,059	8,591	207,326	20,939,866
PENNSYLVANIA	83,201,106	7,320,917	760,365	339,898	244,036	823,898	928,901	93,819,031	299,426	2,994	931,895	94,121,451
RHODE ISLAND	6,350,719	545,074	26,088	23,716	33,064		150,000	7,328,661			150,000	7,328,661
SOUTH CAROLINA	33,999,697	1,214,222	301,472	378,345	84,450	644,158	366,263	36,992,607			366,263	36,992,607
SOUTH DAKOTA	5,793,471	341,530	51,866	35,617		37,510	150,000	6,409,994			150,000	6,409,994
TENNESSEE	40,500,671	900,002	484,161	259,672	238,954	322,311	427,058	43,132,809			427,058	43,132,809
TEXAS	104,926,030	6,572,512	966,469	262,157	316,754	33,483,613	1,465,275	147,992,810			1,465,275	147,992,810
UTAH	5,368,681	400,110	106,974	7,873		263,961	145,042	6,492,643	495,768	4,958	150,000	6,993,369
VERMONT	3,053,648	1,011,546	63,443	10,650		28,988	144,752	4,313,057	524,798	5,248	150,000	4,843,103
VIRGINIA	39,979,387	2,318,117	549,688	398,257		778,917	440,244	44,464,610			440,244	44,464,610
WASHINGTON	20,089,080	1,447,591	348,179	142,713		4,416,192	266,627	26,727,292	538,480	5,385	270,012	27,271,157
WEST VIRGINIA	17,686,814	546,235	238,491	53,011	25,470	299,317	187,593	18,946,931			187,593	18,946,931
WISCONSIN	27,146,124	2,905,141	432,661	95,939		734,020	313,139	31,627,024	1,144,368	11,444	324,583	32,782,836
WYOMING	2,207,965	275,538	49,957	11,852		280,928	147,233	2,973,473	276,670	2,767	150,000	3,252,910
DISTRICT OF COLUMBIA	10,268,060	1,599,430	285,835		148,472		150,000	12,451,797			150,000	12,451,797
AMERICAN SAMOA	383,440						25,000	408,440			25,000	408,440
GUAM	1,015,696	155,914					25,000	1,196,608			25,000	1,196,608
PUERTO RICO	44,811,947	292,978	173,281	61,181		193,223	425,226	48,007,936			475,326	48,007,936
TRUST TERRITORY	1,219,150						25,000	1,244,150			25,000	1,244,150
[illegible]	[illegible]						[illegible]	[illegible]			[illegible]	[illegible]
Dept. of Interior Evaluation & Studies	17,567,233							17,567,233				17,567,233
Undistributed												11,900,000
												230,783

1/ $2.3 million of this amount is reserved for the Migrant Student Record Transfer System

APPENDIX D. DATA SOURCES AND ANALYSIS PROCEDURES

The tables that appear in Chapters II, III, and IV are based on the following data.

Counts of children, of children in poverty, and of children in poverty by alternative definitions (1970) are based on special tabulations commissioned by NIE from the Bureau of the Census. These tabulations were produced for all counties in the 50 States and for the District of Columbia. In addition, these tabulations were produced for all school districts with enrollments over 300. School district boundaries for this tabulation were defined as those in effect during the 1974-75 school year. Mapping census geography to school district boundaries is a project of the CES and the Bureau of the Census.

Counts of "black or Spanish children," by county, are from a file created by Applied Urbanetics, Inc. for the Congressional Research Service.

Title I allocation data and counts of AFDC children and of neglected, delinquent, or foster children used in the Title I formula are official Title I data, made available to NIE by the Congressional Research Service. In contrast, NIE has not used official Title I counts of poor children, and therefore of total eligibles, because the census retabulations mentioned previously are more recent and somewhat more accurate than the official tabulations made available by the Census Bureau to the NCES. The NIE tabulations include an additional 19,000 poor children.

Data on state per-pupil expenditures, used in the Title I cost factor, are the official Title I figures as reported to NCES.

Data on Title I allocations to LEAs were collected from SEAs by CEMREL, Inc., and matched to the ELSEGIS 1975-76 School District Universe file. The resulting file was merged with the census tabulations by school district. As mentioned above, the census tabulations were based on 1974-75 boundaries, so the file merge involved

determination of appropriate procedures in cases where school districts either disappeared or were created through consolidation between 1974-75 and 1975-76.

Data on place type were included in the census tabulations. For each county or school district, separate counts were created of the number of children or poor children living in large central cities, other central cities, etc. SMSA boundaries as of 1975 were taken from a file prepared by Applied Urbanetics, Inc. for the Congressional Research Service. Using the file of 1975 SMSA boundaries, the metropolitan and nonmetropolitan breakdowns in the analyses were made to refer to places within or outside metropolitan areas as of 1975. All places added to existing metropolitan areas, all new metropolitan areas, and all cities designated as central cities between 1970 and 1975 are considered in the analyses to be "suburban."

Two kinds of analyses were performed on these data. Those that did not require simulation of Title I funding (e.g., the distributional impact of the current formula) simply used the Statistical Package for the Social Sciences (SPSS) to produce summary and breakdown tables. Those that did require simulation (e.g., analysis of the effects of the elements of the formulas) utilized the Federal Education Finance (FEF) model, originally produced by Applied Urbanetics, Inc., for the Congressional Research Service, and modified for NIE use by Team Associates, Inc. The FEF model simulates a wide range of funding formulas; as a result of the NIE modification, it also creates an SPSS system file, so the allocations resulting from the simulation can be analyzed using SPSS.

Data from the Survey of Income and Education were tabulated by the Bureau of the Census, which also provided the food stamp tabulations discussed in this report.

APPENDIX E. TITLE I ALLOCATIONS PER PUPIL IN DISTRICTS CLASSIFIED BY INDICATORS OF FISCAL RESOURCES: 1974-75 AND 1975-76*

National Allocations: Average per-Pupil Allocations in Districts Grouped in Quartiles

Equalized property value per pupil (EPV)	1974-75 $ per Pupil	1975-76 $ per Pupil
Highest quartile of districts	29.71	30.02
Third quartile	34.73	35.97
Second quartile	33.18	35.81
Lowest quartile	31.19	36.06
Median family income		
Highest quartile	15.99	18.50
Third quartile	41.28	41.40
Second quartile	32.83	40.07
Lowest quartile	60.25	63.36
Income per pupil		
Highest quartile	26.43	27.74
Third quartile	23.49	27.75
Second quartile	30.53	33.71
Lowest quartile	57.48	57.78
Income per capita		
Highest quartile	19.09	20.25
Third quartile	27.41	31.26
Second quartile	30.66	36.75
Lowest quartile	66.68	68.36

Total Federal aid shows a similar pattern with respect to EPV and is somewhat less redistributive with respect to median family income, income per pupil, and income per capita.

APPENDIX E (Continued)

Within-State Allocations

Equalized property value per pupil	1974-75 $ per Pupil	1975-76 $ per Pupil
Districts in the highest quartile for their State	41.83	39.74
Third quartile	27.31	30.33
Second quartile	27.47	32.43
Lowest quartile	34.28	37.28
Median family income		
Highest quartile	18.56	21.62
Third quartile	31.72	36.72
Second quartile	52.54	49.53
Lowest quartile	57.25	59.15
Income per pupil		
Highest quartile	26.80	29.87
Third quartile	23.62	27.66
Second quartile	28.36	30.66
Lowest quartile	56.30	55.00
Income per capita		
Highest quartile	20.35	23.42
Third quartile	26.45	29.91
Second quartile	35.57	37.71
Lowest quartile	66.37	66.29

Total Federal aid is allocated within-State in such a way that, on average, the districts with highest property values get most, those with the lowest somewhat less, and the middle quartiles least. It is redistributive with respect to median family income per pupil x income per capita but less so than Title I.

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*Comparable data are not yet available for fiscal year 1977, the year for which most of the other analyses reported were performed. Figures are for pupils in average daily membership.

APPENDIX F. CURRENT EXPENDITURE PER PUPIL AND RATABLY REDUCED ALLOCATION PER ELIGIBLE, BY STATE

	CEPP[1]	$ per Eligible[2]
NORTHEAST		
New England		
Maine	$1,050	$165
New Hampshire	1,106	174
Vermont	1,271	200
Massachusetts	1,421	223
Rhode Island	1,482	233
Connecticut	1,507	237
Middle Atlantic		
New York	2,216	244
New Jersey	1,719	244
Pennsylvania	1,451	228
NORTH-CENTRAL		
East North-Central		
Ohio	1,119	176
Michigan	1,467	230
Indiana	1,090	171
Illinois	1,488	234
Wisconsin	1,363	214
West North-Central		
Minnesota	1,485	233
Iowa	1,204	189
Missouri	1,093	172
North Dakota	1,028	163
South Dakota	993	163
Nebraska	1,209	190
Kansas	1,219	191
SOUTH		
South Atlantic		
Delaware	1,461	229
Maryland	1,507	237
District of Columbia	1,653	244

APPENDIX F (Continued)

	CEPP[1]	$ per Eligible[2]
SOUTH		
West Virginia	972	163
Virginia	1,137	178
North Carolina	1,004	163
South Carolina	941	163
Georgia	960	163
Florida	1,237	194
East South-Central		
Kentucky	813	163
Tennessee	926	163
Alabama	850	163
Mississippi	756	163
West South-Central		
Arkansas	803	163
Louisiana	1,042	164
Oklahoma	960	163
Texas	985	163
WEST		
Mountain		
Montana	1,288	202
Idaho	954	163
Wyoming	1,347	212
Colorado	1,238	194
Utah	978	163
New Mexico	1,043	164
Arizona	1,159	182
Nevada	1,150	181
Pacific		
California	1,270	199
Oregon	1,429	224
Washington	1,324	208
Alaska	2,300	244
Hawaii	1,320	207

[1]CEPP in ADA, 1974-1975. Includes all current spending except Federal aid under Titles I, II, and III, ESEA.

[2]Official cost factor x (.3926). This is the amount of ratable reduction in fiscal year 1977 for places unaffected by the hold-harmless provision.

APPENDIX G. REGIONAL ALLOCATIONS BY PLACE TYPE

	NORTHEAST				NORTH CENTRAL			
	Allocation (in millions)	Per School-Aged Child	Per Census Child	Per Formula Eligible	Allocation (in millions)	Per School-Aged Child	Per Census Child	Per Formula Eligible
Central city	$215.20	$58.24	$321.23	$237.76	$155.10	$38.02	$257.07	$207.99
Large	174.94	67.03	331.43	239.46	119.85	44.94	263.85	210.46
Other	40.26	37.11	283.36	230.69	35.25	24.97	236.47	199.23
Suburbs	118.35	17.77	294.57	233.67	89.64	14.22	250.85	208.29
Urban	88.79	17.52	301.39	235.17	59.16	13.02	258.88	210.98
Rural	29.56	18.53	275.82	229.34	30.48	17.32	236.57	203.38
Nonmetropolitan	45.32	29.18	253.41	220.57	122.68	27.46	210.53	195.96
Urban	14.84	27.80	255.90	220.50	33.87	20.39	212.30	194.77
Rural	30.48	29.89	252.23	220.61	88.81	31.63	209.86	196.07

	SOUTH				WEST			
Central city	$180.61	$40.81	$179.01	$173.91	$ 82.42	$31.58	$229.77	$196.78
Large	105.60	41.29	184.84	179.14	60.25	33.79	234.87	198.42
Other	75.01	40.12	171.20	167.03	22.17	26.83	216.99	192.46
Suburbs	152.67	26.42	176.25	172.01	101.07	22.80	231.92	198.30
Urban	79.90	21.34	180.38	175.50	80.79	21.49	232.94	198.16
Rural	72.77	35.76	171.93	168.34	20.28	30.12	227.97	198.84
Nonmetropolitan	327.25	54.14	167.84	165.55	63.18	34.53	206.32	191.62
Urban	89.03	44.95	167.95	165.59	23.61	28.94	205.67	190.27
Rural	238.22	58.71	167.83	165.56	39.57	39.05	206.70	192.42

APPENDIX H. STATES RANKED BY PERCENT POOR, 1975-76

	Title I Dollars Per Pupil Received From LEA Grants	Total Title I Dollars Per Pupil	Percent Difference
Mississippi	79	84	6.3
New Mexico	45	58	28.8
Louisiana	58	63	8.6
Arkansas	55	63	14.5
Georgia	43	45	4.7
Kentucky	47	49	4.3
South Carolina	51	55	7.8
Alabama	56	58	3.5
Tennessee	43	46	7.0
Texas	36	46	27.8
West Virginia	43	46	7.0
North Carolina	42	47	11.9
Florida	32	43	34.4
Arizona	28	34	21.4
Oklahoma	33	37	12.1
Vermont	28	44	57.1
South Dakota	37	41	10.8
District of Columbia	83	98	18.1
Missouri	31	34	9.6
Maine	25	31	24.0
Montana	28	39	39.3
North Dakota	34	44	29.4
Illinois	37	41	10.8
Virginia	34	38	11.8
California	30	35	16.7
Idaho	20	31	5.5
Pennsylvania	37	41	10.8
Nebraska	27	30	11.1
Ohio	22	26	18.2
New York	53	59	11.3
Colorado	25	32	28.0

APPENDIX H. (Continued)

	Title I Dollars Per Pupil Received From LEA Grants	Total Title I Dollars Per Pupil	Percent Difference
Michigan	33	40	21.2
Oregon	24	40	37.9
Nevada	15	18	20.0
Rhode Island	38	43	13.2
Wyoming	25	37	48.0
Washington	25	33	32.0
Utah	17	21	23.5
Minnesota	28	33	17.9
Delaware	33	45	36.3
New Jersey	34	41	20.6
Indiana	19	22	15.8
Kansas	27	32	18.5
Hawaii	30	33	10.0
Iowa	25	27	8.0
New Hampshire	16	21	31.2
Maryland	32	36	12.5
Wisconsin	28	35	25.0
Massachusetts	25	31	24.0
Connecticut	25	30	20.0
Alaska	38	63	65.8

APPENDIX I. EFFECTS OF OMITTING AFDC COUNTS FROM FORMULA
($ in millions)

	Current Allocation	Omitting AFDC	Difference
NORTHEAST	378.87	337.80	41.07
New England	67.17	64.09	3.08
Maine	6.53	6.86	-0.33
New Hampshire	2.80	2.92	-0.12
Vermont	3.05	3.01	0.04
Massachusetts	32.13	29.81	2.32
Rhode Island	6.55	6.48	0.07
Connecticut	16.11	15.01	1.10
Middle Atlantic	311.70	273.71	37.99
New York	180.52	150.78	29.74
New Jersey	47.98	43.60	4.38
Pennsylvania	83.20	79.33	3.87
SOUTH	660.53	717.35	-56.82
South Atlantic	295.67	320.34	-24.67
Delaware	4.33	4.57	-0.24
Maryland	29.46	31.90	-2.44
District of Columbia	10.27	10.11	0.16
West Virginia	17.69	19.27	-1.58
Virginia	39.98	43.47	-3.49
North Carolina	51.89	56.46	-4.57
South Carolina	34.00	37.01	-3.01
Georgia	48.42	52.67	-4.25
Florida	59.63	64.88	-5.25
East South-Central	162.87	177.26	-14.39
Kentucky	34.71	37.76	-3.05
Tennessee	40.50	44.12	-3.62
Alabama	44.79	48.75	-3.96
Mississippi	42.87	46.63	-3.76
West South-Central	201.99	219.75	-17.76
Arkansas	25.47	27.71	-2.24
Louisiana	51.29	55.77	-4.48
Oklahoma	20.30	22.04	-1.74
Texas	104.93	114.23	-9.30

	Current Allocation	Omitting AFDC	Difference
NORTH-CENTRAL	367.42	352.64	14.78
East North-Central	262.41	242.66	19.75
Ohio	51.11	54.63	-3.52
Michigan	72.39	58.51	13.88
Indiana	22.64	24.21	-1.57
Illinois	89.12	79.45	9.67
Wisconsin	27.15	25.86	1.29
West North-Central	105.01	109.98	-4.97
Minnesota	26.29	26.36	-0.07
Iowa	15.25	15.40	-0.15
Missouri	30.69	33.33	-2.64
North Dakota	4.66	4.95	-0.29
South Dakota	5.79	6.21	-0.42
Nebraska	9.10	9.79	-0.69
Kansas	13.23	13.94	-0.71
WEST	246.67	245.70	0.91
Mountain	63.19	67.86	-4.67
Montana	5.25	5.71	-0.46
Idaho	4.08	4.32	-0.24
Wyoming	2.21	2.41	-0.20
Colorado	14.88	15.82	-0.94
Utah	5.57	5.69	-0.12
New Mexico	13.39	14.55	-1.16
Arizona	15.72	17.09	-1.37
Nevada	2.09	2.27	-0.18
Pacific	183.48	177.84	5.64
California	139.88	136.46	3.42
Oregon	14.71	14.11	0.60
Washington	20.07	19.32	0.75
Alaska	3.42	3.47	-0.05
Hawaii	5.40	4.48	0.92

APPENDIX J. EFFECTS OF FULLY WEIGHTING AFDC ABOVE POVERTY

	AFDC Full Weight	Current	Difference
NORTHEAST	397.04	378.87	18.17
New England	68.54	67.17	1.37
Mid Atlantic	328.50	311.70	16.80
NORTH-CENTRAL	373.95	367.42	6.53
East North-Central	271.10	262.41	8.69
West North-Central	102.85	105.01	-2.16
SOUTH	640.43	660.53	-25.10
South Atlantic	284.77	295.67	-10.90
East South-Central	156.53	162.87	-6.34
West South-Central	194.13	201.99	-7.86
WEST	247.07	251.67	0.40
Mountain	61.11	68.19	-2.08
Pacific	185.96	183.48	2.48
NORTHEAST			
New England			
Maine	6.38	6.53	-0.15
New Hampshire	2.76	2.80	-0.04
Vermont	3.07	3.05	0.02
Massachusetts	33.15	32.13	1.02
Rhode Island	6.59	6.55	0.04
Connecticut	16.59	16.11	0.48
	68.54	67.17	1.37
Mid Atlantic			
New York	193.60	180.52	13.14
New Jersey	49.90	47.98	1.92
Pennsylvania	84.94	83.20	1.74
	328.50	311.70	16.80
Total Northeast	397.04	378.87	18.17

APPENDIX J. (Continued)

	AFDC Full Weight	Current	Difference
NORTH-CENTRAL			
East North-Central			
Ohio	49.55	51.11	-1.56
Michigan	78.50	72.39	6.11
Indiana	21.95	22.64	-0.69
Illinois	93.38	89.12	4.26
Wisconsin	27.72	27.15	0.57
	271.10	262.41	8.69
West North-Central			
Minnesota	26.26	26.29	-0.03
Iowa	15.18	15.25	-0.07
Missouri	29.53	30.69	-1.16
North Dakota	4.54	4.66	-0.12
South Dakota	5.61	5.79	-0.18
Nebraska	8.80	9.10	-0.30
Kansas	12.93	13.23	-0.30
	102.85	105.01	-2.16
Total North-Central	373.95	367.42	6.53
SOUTH			
South Atlantic			
Delaware	4.21	4.33	-0.12
Maryland	28.40	29.46	-1.06
District of Columbia	10.34	10.27	0.07
West Virginia	17.00	17.69	-0.69
Virginia	38.45	39.98	-1.53
North Carolina	49.86	51.89	-2.03
South Carolina	32.67	34.00	-1.33
Georgia	46.54	48.42	-1.88
Florida	57.30	59.63	-2.33
	284.77	295.67	-10.90
East South-Central			
Kentucky	33.37	34.71	-1.34
Tennessee	38.92	40.50	-1.58
Alabama	43.04	44.79	-1.75
Mississippi	41.20	42.87	-1.67
	156.53	162.87	-6.34

APPENDIX J. (Continued)

	AFDC Full Weight	Current	Difference
West South-Central			
Arkansas	24.47	25.47	-1.00
Louisiana	49.29	51.29	-2.00
Oklahoma	19.54	20.30	-0.76
Texas	100.83	104.93	-4.10
	194.13	201.99	-7.86
Total South	635.43	660.53	-25.10
WEST			
Mountain			
Montana	5.05	5.25	-0.20
Idaho	3.97	4.08	-0.11
Wyoming	2.12	2.21	-0.09
Colorado	14.47	14.88	-0.41
Utah	5.52	5.57	-0.05
New Mexico	12.87	13.39	-0.52
Arizona	15.10	15.72	-0.62
Nevada	2.01	2.09	-0.08
	61.11	68.19	-2.08
Pacific			
California	141.39	139.88	1.51
Oregon	14.98	14.71	0.27
Washington	20.40	20.07	0.33
Alaska	3.39	3.42	-0.03
Hawaii	5.80	5.40	0.40
	185.96	183.48	2.48
Total West	247.07	251.67	0.40

APPENDIX K. STATE-BY-STATE COMPARISON OF CURRENT COST FACTOR WITH UNIFORM COST FACTOR
($ in millions)

	Current Cost Factor	Uniform Cost Factor	Difference
NORTHEAST	378.87	311.60	67.27
New England	67.17	60.11	7.06
Maine	6.53	7.65	-1.12
New Hampshire	2.80	3.12	-0.32
Vermont	3.05	2.96	0.09
Massachusetts	32.13	27.81	4.32
Rhode Island	6.55	5.44	1.11
Connecticut	16.11	13.13	2.98
Middle Atlantic	311.70	251.49	60.21
New York	180.52	142.93	37.59
New Jersey	47.98	37.97	10.01
Pennsylvania	83.20	70.59	12.61
SOUTH	660.53	752.02	-91.49
South Atlantic	295.67	318.97	-23.30
Delaware	4.33	3.63	0.70
Maryland	29.46	24.07	5.39
District of Columbia	10.27	8.13	2.14
West Virginia	17.69	21.04	-3.35
Virginia	39.98	43.28	-3.30
North Carolina	51.89	61.63	-9.74
South Carolina	34.00	40.40	-6.40
Georgia	48.42	57.49	-9.07
Florida	59.63	59.30	0.33
East South-Central	162.87	193.51	-30.64
Kentucky	34.71	41.25	-6.54
Tennessee	40.50	48.16	-7.66
Alabama	44.79	53.21	-8.42
Mississippi	42.87	50.89	-8.02
West South-Central	201.99	239.54	-37.55
Arkansas	25.47	30.25	-4.78
Louisiana	51.29	60.47	-9.18
Oklahoma	20.30	24.13	-3.83
Texas	104.93	124.69	-19.76
NORTH-CENTRAL	367.42	347.41	20.01
East North-Central	262.41	240.48	21.93
Ohio	51.11	56.17	-5.06
Michigan	72.39	60.62	11.77
Indiana	22.64	25.56	-2.92
Illinois	89.12	73.62	15.50
Wisconsin	27.15	24.51	2.64
West North-Central	105.01	106.93	-1.92
Minnesota	26.29	21.79	4.50
Iowa	15.25	15.57	-0.32
Missouri	30.69	34.55	-3.86
North Dakota	4.66	5.52	-0.86
South Dakota	5.79	6.87	-1.08
Nebraska	9.10	9.26	-0.16
Kansas	13.23	13.37	-0.14
WEST	246.67	242.45	4.22
Mountain	63.19	67.96	-4.77
Montana	5.25	5.01	0.24
Idaho	4.08	4.84	-0.76
Wyoming	2.21	2.02	0.19
Colorado	14.88	14.79	0.09
Utah	5.57	6.62	-1.05
New Mexico	13.39	15.77	-2.38
Arizona	15.72	16.67	-0.95
Nevada	2.09	2.24	-0.15
Pacific	183.48	174.49	8.99
California	139.88	135.48	4.40
Oregon	14.71	12.67	2.04
Washington	20.07	18.63	1.44
Alaska	3.42	2.69	0.73
Hawaii	5.40	5.02	0.38

APPENDIX L. STATE-BY-STATE COMPARISON OF CURRENT COST FACTOR WITH UNLIMITED COST FACTOR

($ in millions)

	Current Cost Factor	Unlimited Cost Factor	Difference
NORTHEAST	78.87	452.69	-73.82
New England	67.17	65.95	1.22
Maine	6.53	6.41	0.12
New Hampshire	2.80	2.76	0.04
Vermont	3.05	3.00	0.05
Massachusetts	32.13	31.54	0.59
Rhode Island	6.55	6.44	0.11
Connecticut	16.11	15.81	0.30
Middle Atlantic	311.70	386.74	-75.04
New York	180.52	252.89	-72.37
New Jersey	47.98	52.10	-4.12
Pennsylvania	83.20	81.74	1.46
NORTH-CENTRAL	367.41	360.39	7.02
East North-Central	262.41	257.54	4.87
Ohio	51.11	50.18	0.93
Michigan	72.39	71.00	1.39
Indiana	22.64	22.23	0.31
Illinois	89.12	87.45	1.67
Wisconsin	27.15	26.67	0.48
West North-Central	105.01	102.85	2.16
Minnesota	26.29	25.82	0.47
Iowa	15.25	14.96	0.29
Missouri	30.69	30.15	0.54
North Dakota	4.66	4.53	0.13
South Dakota	5.79	5.45	0.34
Nebraska	9.10	8.94	0.16
Kansas	13.23	13.00	0.23
SOUTH	660.50	597.26	63.24
South Atlantic	295.66	281.84	13.82
Delaware	4.33	4.24	0.09
Maryland	29.46	28.95	0.51
District of Columbia	10.26	10.72	-0.46
West Virginia	17.68	16.33	1.35

APPENDIX L. (Continued)

	Current Cost Factor	Unlimited Cost Factor	Difference
Virginia	39.98	39.28	0.70
North Carolina	51.89	49.38	2.51
South Carolina	34.00	30.34	3.66
Georgia	48.42	44.06	4.36
Florida	59.63	58.54	1.09
East South-Central	162.87	129.18	33.69
Kentucky	34.21	26.76	5.45
Tennessee	40.50	35.59	4.91
Alabama	44.79	36.09	8.71
Mississippi	42.87	30.73	12.14
West South-Central	201.98	186.23	15.75
Arkansas	25.47	19.39	6.08
Louisiana	51.29	50.31	0.98
Oklahoma	20.30	18.49	1.81
Texas	104.92	98.03	6.89
WEST	246.66	243.13	3.53
Mountain	63.19	61.41	1.78
Montana	5.25	5.15	0.10
Idaho	4.08	3.69	0.39
Wyoming	2.21	2.17	0.04
Colorado	14.88	14.62	0.26
Utah	5.56	5.17	0.39
New Mexico	13.39	13.13	0.26
Arizona	15.72	15.42	0.30
Nevada	2.09	2.06	0.03
Pacific	183.48	181.72	1.76
California	139.88	137.34	2.54
Oregon	14.71	14.45	0.26
Washington	20.07	19.69	0.38
Alaska	3.42	4.94	-1.52
Hawaii	5.40	5.29	0.11

APPENDIX M. PERCENT OF POOR CHILDREN, AT THREE SCALINGS OF ORSHANSKY FORMULA, BY PLACE TYPE AND REGION

	NORTHEAST			NORTH-CENTRAL			SOUTH			WEST		
	Current	125%	150%	Current	125%	150%	Current	125%	150%	Current	125%	150%
Central city	8.7	8.7	8.5	7.8	7.6	7.6	13.1	12.7	12.0	4.6	4.5	4.6
Large	6.8	6.8	6.5	5.9	5.6	5.5	7.4	7.2	6.9	3.3	3.2	3.2
Other	1.9	1.9	2.0	1.9	2.0	2.1	5.7	5.5	5.1	1.3	1.3	1.4
Suburban	5.2	5.8	6.5	4.6	5.0	5.7	11.2	11.4	11.5	5.7	5.8	6.0
Urban	3.8	4.1	4.6	2.9	3.1	3.5	5.7	6.0	6.1	4.5	4.6	4.8
Rural	1.4	1.7	1.9	1.7	1.9	2.2	5.5	5.4	5.4	1.2	1.2	1.2
Nonmetropolitan	2.3	2.7	3.1	7.6	8.3	8.9	25.2	23.4	21.5	4.0	4.1	4.1
Urban	0.8	0.8	1.0	2.1	2.4	2.6	6.8	6.5	6.1	1.5	1.6	1.6
Rural	1.5	1.9	2.1	5.5	5.9	6.3	18.4	16.9	15.4	2.5	2.5	2.5
Total	16.2	17.2	18.1	20.0	20.9	22.2	49.5	47.5	45.0	14.3	14.4	14.7

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